REPORT RESUMES

ED 012 783 VT 001 879

BUSINESS PROCEDURES USED IN THE AGRICULTURAL SERVICES.

BY- PLANK, HARRY

OHIO STATE UNIV., COLUMBUS

REPORT NUMBER OSU-AGDEX-875 PUB DATE 66

OHIO STATE DEPT. OF EDUCATION, COLUMBUS

EDRS PRICE MF-$0.75 HC-$6.88 172P.

DESCRIPTORS- *OFF FARM AGRICULTURAL OCCUPATIONS, *VOCATIONAL AGRICULTURE, *BUSINESS SKILLS, *WORKBOOKS, HIGH SCHOOLS, COLUMBUS

THE PURPOSE OF THIS WORKBOOK IS TO HELP VOCATIONAL AGRICULTURE STUDENTS WHO HAVE AN OCCUPATIONAL INTEREST IN OFF-FARM AGRICULTURE BUSINESS UNDERSTAND BASIC BUSINESS OPERATIONS. THE DOCUMENT WAS DEVELOPED BY A TEACHER WITH BUSINESS EXPERIENCE AFTER CONSULTATION WITH TEACHERS AND BUSINESSMEN AND WAS PUBLISHED AFTER ADVANCE COPIES WERE TRIED WITH CLASSES. THE EDUCATIONAL OBJECTIVES ARE TO HELP STUDENTS DEVELOP AN UNDERSTANDING OF BASIC BUSINESS PRINCIPLES IN FARM SUPPLY, PRINCIPLES OF BUSINESS ACCOUNTING, AND JOB OPPORTUNITIES AND REQUIREMENTS. SECTIONS INCLUDE--(1) FARM AND BUSINESS TYPES, (2) MERCHANDISE INVENTORY, (3) MERCHANDISE PRICING, (4) BUSINESS POLICY, (5) SALES TAX, (6) CUSTOMER BILLING, (7) STATEMENTS AND SERVICE CHARGES, (8) CASH BALANCE, (9) PURCHASE AND STORAGE, AND (10) A 1-MONTH PROBLEM. THE WORKBOOK INCLUDES SPECIFIC PROBLEM ASSIGNMENTS, EXAMPLES OF BUSINESS FORMS, AND TABLES. IT WOULD BE APPROPRIATE AS READING AND PROBLEM ASSIGNMENTS OVER A PERIOD OF 100 HOURS FOR VOCATIONAL AGRICULTURE STUDENTS OF GRADES 11 AND 12 WHO ARE ENGAGED IN BUSINESS WORK EXPERIENCE. THIS DOCUMENT IS ALSO AVAILABLE FROM OHIO VOCATIONAL AGRICULTURE, INSTRUCTIONAL MATERIALS SERVICE, THE OHIO STATE UNIVERSITY, 2120 FYFFE ROAD, COLUMBUS, OHIO 43210, FOR $2.25. A TEST-ANSWER SUPPLEMENT IS AVAILABLE FROM THE SAME SOURCE FOR $2.00. (JM)

ED012783

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

AGDEX 835

BUSINESS PROCEDURES USED IN THE AGRICULTURAL SERVICES

Agricultural Education Department
The Ohio State University
and
Vocational Agriculture Service
Department of Education
Columbus, Ohio
1966

VT 01879

CONTENTS

To The Student i

To The Teacher ii

Materials Needed iii

Suggested References iii

Acknowledgements iv

I. Type of Farming and Kinds of Agricultural Businesses in a Community 1

II. Maintaining an Inventory of Merchandise 9

III. Determining the Selling Price of Merchandise 31

IV. Understanding Business Policy 37

V. Sales Tax 49

VI. Billing Merchandise to Customers 55

VII. Monthly Statements and Service Charges 61

VIII. Daily Cash Balance --- Monthly Bank Balance 85

IX. Purchasing and Storing Grain 97

X. One Month Problem 121

TO THE STUDENT

This is a workbook that has been designed to help students understand the business operations of the many companies that are supplying materials and services to the operating farmers. It has been written with two groups of students in mind:

1. Students interested in agriculture who do not have an opportunity to enter the business of farming but who would like to have a job in the farm related businesses.

2. Students who will return to the farm as operating farmers. Farming is a business in its own right, and the principles of operating the farm are similar to the business principles of the farm-related businesses.

In completing the units in this workbook, the student will learn some of the principles of operating a farm related business. This is not intended to be a complete course in business management and salesmanship. Rather, it is a basis for a better understanding of the operations of a business that a student may enter after graduation. The material here presented is designed to be used along with a student's occupational work experience in a farm-related business or along with his farming program if his future plans are to be an operating farmer. The discussion of the business procedures will be conducted in the classroom, and the application of them will be observed and used on the job or through purchases for the farming business. Actual on-the-job experiences should be applied to the class discussion.

The business principles and procedures will apply, in general, to most farm supply and service businesses. However, each type of business and each individual business will have its own peculiar set of problems. The book is written to apply in any area where there are businesses serving farmers, but local situations should be worked in to make it more applicable to your community.

There are many job opportunities in the farm related businesses for those who are willing to prepare themselves for them. In these jobs the businessman is working directly with farm people both in the place of business and on the farm. The best background for this kind of an occupation is growing up in a rural community plus some understanding of the basic principles of operating these businesses.

If you train for a job in this area, you will be a part of the nation's agricultural business which has the vital job of supplying food and fiber to the people of our country and of the world.

TO THE TEACHER

SEMESTER UNIT:

This workbook has been written as a semester unit and should fit into a curriculum program where semester units are being offered and there is a semester offering in Agri-Business. The workbook might also be used as the basis for a full year in Agri-Business with supplemental materials introduced along with the workbook. There are many opportunities for field trips, outside speakers and special reports along with the class sessions.

SALESMANSHIP AND ADVERTISING:

These areas have not been covered in this workbook and could very well be added in making the full year's curriculum in Agri-Business. This book is built around the mechanical principles of maintaining an inventory of merchandise and getting these products billed out to customers and accounted for as sales are made.

ON - JOB EXPERIENCE:

The unit will be best applied along with the experience of students who are actually out on a job. They may bring in sales slips and office forms from the business in which they are working, and their experiences on the job will add interest to the class discussions.

GRAIN ELEVATOR AND FEED MILL:

The problems and examples in this unit are primarily from the grain and feed business. It is felt that in every community there are a number of these businesses and that a student may very likely be working at one of these places of business. However, application of the principles can be made to any of the agricultural businesses.

OBJECTIVES:

The educational objectives of this unit are as follows:

1. To develop an understanding of some of the more important business principles involved in the selling of goods and services to farmers.
2. To develop an understanding of some of the principles of business accounting.
3. To acquaint students with some of the job opportunities and requirements for employment in the business of selling goods and services to farmers.

TEST AND ANSWER SUPPLEMENT:

Printed as a separate unit to go along with the workbook is a supplement containing a test for use at the completion of each chapter. In this supplement are answers to these test sheets and to all the problems and examples used in the workbook, including the one-month problem. These tests may be duplicated at your school for use with your classes.

MATERIALS NEEDED

Each student will need a pad of consecutively numbered sales tickets that have the features of the examples printed in this unit. They will be used for the one-month problem. These sales tickets can probably be purchased from a local merchant at a reasonable price, or they may be duplicated at the local school.

All other forms are in the workbook unless the teacher wants additional problems on such forms as statements, bank deposit slips, inventory records, etc.

SUGGESTED REFERENCES

Facts on Farming in Ohio, Department of Agricultural Education, The Ohio State University. (One copy per vo-ag department with information for the local county has been distributed.)

Census of Agriculture, U. S. Bureau of Census, U. S. Department of Commerce. (Latest Report) U. S. Government Printing Office, Washington, D. C. (copy usually on file in Agricultural Extension Office,)

1960 Changes in Population in Agriculture in Ohio and Their Implications, RC 104. The Ohio Agricultural Experiment Station, Wooster, Ohio.

Phillips, Richard, Managing for Greater Returns in Grain, Feed and Other Retail Businesses Serving Agriculture, Garner Publishing Co., Des Moines, Iowa.

Milner, Ross, How to Determine Shrinkage in Grain, Bulletin 425, Agricultural Extension Service, The Ohio State University, Columbus, Ohio.

The lesson unit, "Business Procedures Used in the Agricultural Services," has been prepared by Mr. Harry Plank, Teacher of Vocational Agriculture, Smithville, Ohio. In addition to teaching, Mr. Plank has had extensive managerial experience in the feed and grain business. The workbook has been prepared as a special problem with the Department of Agricultural Education, under the direction of Professor Ralph J. Woodin,

ACKNOWLEDGEMENTS

The forerunner of this workbook was prepared by Mr. Howard Nowels, Teacher of Vocational Agriculture, Fremont Ross High School, and Dr. Harlan E. Ridenour, Director of the Vocational Agriculture Instructional Materials Service, The Ohio State University. The title of the unit prepared by these two men is "Merchandising Products Used in the Farm Business" and is a six weeks unit of work.

Parts of Mr. Nowels' and Dr. Ridenour's book have been incorporated in this "Business Procedure" book. The author, Harry Plank, and Dr. Ridenour worked with a committee of vocational agriculture teachers in Ohio who had used the "Merchandising" workbook. This committee made suggestions and reviewed the material that has gone into the "Business Procedure" unit. The committee consisted of:

Ponney G. Cisco, Vocational Agriculture Teacher, Germantown, Ohio
Odell Miller, Vocational Agriculture Teacher, Marysville, Ohio
Jack Devitt, Vocational Agriculture Teacher, Ottoville, Ohio

The assistance of a number of agricultural businesses in Wayne County, Ohio, is appreciated in securing forms for the workbook.

Mr. George Greenleaf, Executive Vice President of the Ohio Grain and Feed Dealers Association, provided many helpful suggestions for the preparation of the unit and reviewed the final copy of the manuscript.

CHAPTER I: TYPE OF FARMING AND KINDS OF AGRICULTURAL BUSINESSES IN A COMMUNITY

A. Farmers and Agricultural Merchants Work Together.

Modern farming methods require that a wide variety of products produced off the farm be used in operating the farm business. Because of this, there are many businesses in farming communities that specialize in providing agricultural services, supplies and equipment to farmers for use in their farm business. This is a great contrast with the operation of farms of former years when they were largely self-sufficient.

The kind of agricultural businesses that develop and continue to operate in a rural community depends on the farming operations in that community.

B. The agricultural merchants actually serve as "purchasing agents" for the community. They select and assemble the products needed in conducting the farm business in a convenient location for the farmer.

This local market point has several advantages for the farmer:

1. Manufacturers and wholesalers are not generally organized to deal directly with the farmer.
2. The farmer can obtain products as he needs them. The expense of carrying an inventory of supplies is carried by the merchant rather than the farmer.
3. The farmer can obtain information and service from his local merchant that he could not get from some company located many miles away.
4. The local merchant is in a position to distribute products in small quantities where this is needed.
5. The farmer's time is saved in locating sources of supply and in placing orders.
6. The merchant can locate sources of supply for seldom used items not commonly carried in stock.
7. The farmer obtains his products in a usuable form. They are assembled ready for use, and he is not troubled with items that have been damaged in shipment.
8. The merchant provides the farmer with new ideas by means of displaying, demonstrating and advertising his products.
9. Some agricultural businesses offer services that reduce the farmer's investment in high priced machinery such as bulk fertilizer and lime spreaders, feed grinding and mixing, or the leasing of field machinery.
10. Marketing businesses are organized to help the farmer in marketing his products more efficiently.
11. Can you think of other services offered by your local agricultural merchants?

    ____

    ____

    ____

    ____

C. As you study this chapter you will begin to see that the FARMER AND THE AGRICULTURAL MERCHANT MAKE UP A TEAM IN THE BUSINESS OF PRODUCING FOOD AND FIBER.

D. Now let us take a statistical look at the agricultural production in your county. These are figures that an agricultural businessman is interested in. It helps him determine the products and services that the farmers in his community will need in conducting their farm businesses.

E. The merchant is actually buying for his customers and must consider the merchandise from the farmer's point of view. It would be foolish to carry a large supply of hog feeders in a community where there are not many hogs raised.

Try to place yourself in the position of a businessman in your community and study the farms in the area to determine the types of businesses and kind of goods and services that would be greatest in demand.

The figures for this kind of a study can be found in the census of agriculture. These figures are brought up to date every five years and are available for any county in the United States.

The following exercises will help you in conducting this study: the publication "Facts on Farming in Ohio" issued by the Department of Agricultural Education, The Ohio State University, will supply the information called for in your exercise. (Pages in parentheses refer to this publication.) Other references are suggested in the materials needed section. In addition you may rely on your personal experiences in determining the type of farming in your area.

How important is our agricultural industry? (p. 3)

1. Total value of farm land and buildings. $__________
2. Total value of products sold. $__________
3. Number of farms with sales of $5000 or more. __________
4. Number of farms with sales of less than $5000. __________
5. List commoditites in order or rank according to cash receipts from sales.

	COMMODITY	ESTIMAGED CASH RECEIPTS FROM SALES	% OF TOTAL CASH RECEIPTS
1st			
2nd			
3rd			
4th			
5th			

5. List commodities (cont.)

6th

7th

8th

9th

10th

What is the relationship between the items on the above list and the products that are handled by your local merchants?

F. What is the size of the farms in your county:

The larger the farms in your community the better the farm managers as a general rule. They are used to buying in larger quantities and demanding more service. The agricultural merchant will have to adjust his operations somewhat to the size of farms. For example:

1. Large farmers may require more storage for grain.
2. In an area where there is a large acreage of corn the farmers may demand anhydrous ammonia service.
3. In areas where theyre are a large number of cage layer houses, bulk feed handling service will be a must.

LIST THE SIZES OF FARMS IN YOUR COUNTY: (p. 5)

Number under 100 acres
Number 100 to 179 acres
Number 180 to 499 acres
Number 500 acres and over
Average size of farm (county)

G. What are the types of farms in your community? (p. 6)

1.
2.
3.
4.
5.
6.
7.

How many livestock are kept and what are the leading crops in acres harvested on farms? (pp. 17 and 19)

	ENTERPRISE	HEAD OR ACRES
1.	________	________
2.	________	________
3.	________	________
4.	________	________
5.	________	________
6.	________	________
7.	________	________
8.	________	________
9.	________	________
10.	________	________
11.	________	________
12.	________	________

H. What are the major farm expenditures in your county?

These figures will help the merchant to determine what lines of merchandise are more apt to sell and what kinds of businesses will be profitable.

FIND OUT WHERE THE AGRICULTURAL DOLLARS ARE BEING SPENT: (p. 13)

Feed for livestock and poultry	$________
Livestock and poultry purchased	$________
Hired labor	$________
Gasoline and petroleum products	$________
Seeds and plants	$________
Lime and fertilizer	$________
Machine Hire	$________
Other	$________

The information listed on these two pages shows the enterprises from which the farmers receive their income and then what these income dollars are spent for. Analyze the information you have gathered and list the principal product lines you think should be successful in this community. (An example of a product line is dairy equipment.)

________	________
________	________
________	________
________	________

I. Farm related businesses.

As a merchant or as a farmer it is important for you to be acquainted with the farm related businesses in your territory. For class discussion: Why is this important? Prepare a list of the farm related businesses that serve the farmers in your territory.

Name of Business Firm	Type of Business*
1.	
2.	
3.	
4.	
5.	

*Type refers to such businesses as feed, implement, etc.

The farmers of your territory use a great variety of different items in conducting their business. To help you in understanding the way in which the merchants and farmers work together, prepare a list of some of the important products and services offered by your local merchants.

PRODUCTS OR MATERIALS	SERVICES
Feed	Custom Barn Spraying
Fertilizer	Milk Marketing

Can you see a relationship between the agricultural production figures from the census and the types of agricultural products and services offered in your county?

Suggested Class Activity: Conduct a pre-arranged field trip to one or more local merchants to obtain their help in listing and classifying the main products being sold in your community.

J. Comparing types of farming with kinds of related businesses in the territory.

The information you have been gathering about local farms and farm related businesses will enable a merchant to base his business on facts instead of fancies. He will be less likely to carry a large supply of items that will be slow moving. (For example, hog self-feeders in a dairy area.) Also, a knowledge of the size of farm and the prosperity of their operation will help in judging the size and cost of equipment farmers will be able to buy. When a merchant stocks the products farmers need in his line of business, he may well become known as the "headquarters" for the items farmers want.

Discuss the following items and write your conclusions in the space provided.

1. How well are the needs of the farmers being met by the items carried in stock by the merchants? ______________________________

____

____

____

2. What problems do the local merchants have in knowing the items they should stock in their inventory, how many items they should carry and the quality of the products they offer for sale? ______________________________

____

____

____

3. What are the decisions a merchant must make when a new herbicide or a new fertilizer attachment or other new product is produced and offered on the market?

____

____

____

____

4. What are the problems faced by merchants in stocking such timely items as antifreeze in order to have an adequate supply in their inventory when the demand arises? ______________________________

____

____

____

5. What may be the result of a merchant being over stocked with high cost seasonal items, such as corn planters, and has to carry them over another year?

6. Would a merchant ever be justified in handling low profit items that are in strong demand by farmers even though he might lose money on the product? (For example, grinding and mixing feed at or below cost.)

CHAPTER II: MAINTAINING AN INVENTORY OF MERCHANDISE

The inventory is the basis of the business. The inventory includes all the items that the merchant has to sell. This means that keeping the right items and keeping the proper amounts on hand are very important to the successful operation of the business.

A. Inventory may be overstocked:

This means that items may have to be sold at a reduced price to get rid of them and this means lower profit.

Some items may get out-dated or a new product take its place. This happens with many of the drug items and farm chemicals.

Some items do not store well and may have to be sold at a reduced price because of broken packages, damaged conditions, etc.

B. Inventory may be understocked:

This means that the merchant may lose business because he does not have an item on hand when a customer asks for it.

If this happens to a customer too often at the same place of business he might decide that he will just "not bother to stop at that place any more."

Time is often lost by the manager or the employees of a business if they have to spend extra time in making out special orders or in going someplace to pick up a special shipment of an item.

C. Balance is the key word:

Thus, a balanced inventory is the aim in a good business operation. Rather, not too much of an item on hand and at the same time having enough on hand to take care of customer needs.

D. Maintaining balance:

In order to maintain this balance of inventory, it is necessary that everyone in the business work on INVENTORY CONTROL.

1. The employees in the store should report to the manager when an item is getting low.
2. The manager should re-order items promptly.
3. The office clerk must maintain the inventory records.

This chapter will deal with the records necessary to keep an accurate control of the inventory.

E. Some management uses of the inventory records:

1. Determines the rate of turnover during the year. The rate of turnover is the number of times a given item sells out and has to be replaced during the year.

Example: If an average of 25 twelve ounce claw hammers were carried in stock and 100 were sold during the year the rate of turnover would be 100/25, or 4 times.

Problem: If 50 cases of XX brand hog wormer were sold during the fiscal year and an average of 10 cases were carried in stock, what is the rate of turnover?

____

One agricultural business lists desired turnover rates as follows:

Feed	15	Seed	9
Fence	4	Oil and Grease	4
Paint	4	Building Material	4
Hardware	3	General Farm Supplies	4
Machinery	4		

2. Helps determine loss due to shrinkage, theft, damage and other causes.

3. Shows the investment in the merchandise carried in stock. This is the total investment in inventory or the investment in any one item. This helps the manager determine money needs at various times of the year. The business may have to borrow money for inventory at peak times of the year such as fertilizer season, etc.

4. Inventory costs are used as a pricing guide. If an item is overstocked and the price has to be reduced to sell it, the cost price can easily be found by looking at the inventory records.

5. Inventory figures are used for end of the year reports and tax reports. Money and time can be saved by having accurate and current inventory records.

6. Inventory figures are used to determine the insurance needs of the business. Insurance is carried on mechandise as well as the buildings and the value of merchandise can be determined easily from inventory records.

7. Inventory records help to determine which are the most profitable items in the business. By knowing the costs in each department and the sales from each particular item, the profit margins can be figured.

F. Classification of Inventory Items: Profit wise, there are three types of items carried.

1. Items that make a profit.

2. Items of low profit but which must be carried as a service to customers and also to encourage customers to come into the place of business,

3. Items that actually lose money but may be carried or offered to meet competition. (This often creates a problem for the manager; should I carry this item and lose money, or should I hold the price and make some money on the few items that I sell, or should I not carry the item and lose some business.

G. **Keeping track of inventory:**

There is only one way of actually knowing how many units of any particular item there are on hand, and this to TAKE A PHYSICAL COUNT. This physical count will vary with the business and the manager, but it may be done monthly, quarterly, semi-annually or annually.

H. **Inventory forms:**

After the physical count has been taken, these amounts are transferred by the office staff onto the inventory forms which indicate:

1. The amount of the item on hand.
2. The cost per unit of this item.
3. The total value of this item on hand.

Figure 1 shows an end of the month listing of inventory items on hand. This listing shows:

1. The actual count (in different parts of the store)
2. What the item is.
3. The unit in which the price is listed.
4. The number of these units
5. The price of each unit
6. The total column

An example of an inventory form that may be used is as follows:

FIGURE 1. END OF MONTH INVENTORY FORM

Inventory for month ending ______________ 19 ______

① Actual Count Different Locations			② Description of Items	③ Unit	④ No. of Units	⑤ Unit Price		⑥ Amount	
	(9250	lb.)	oats	cwt.	92½	$ 2	30		
25	20	5	100# sacks bran	Ton	5	63	00		
200	40		50# sacks 5-20-20	Ton	6	57	00		
80			Ryegrass seed	lb.	80		12		
12			5 gal. can motor oil	(can)	12	5	25		
8			Stock dip	gal.	8	1	90		
10	5		baler twine	bale	15	8	75		
					TOTAL				

1. Provision is made to record the actual count of the items in stock. More than one column is provided since the items may be in more than one location in the place of business.

2. A brief description of the item is given.

3. The size of unit in which the merchandise is commonly handled in. That is - ton, hundredweight, box, each (for items sold singly), etc.

4. The number of units in stock. (This may not be the total of column one. For example, a feed dealer may have fifty 100 pound sacks of bran. Since the unit is in tons, the number of units would be 2 1/2 tons.

5. The unit price shows the cost of the item to the merchant.

6. The amount is the total value of the item in stock.

Exercise: Complete the "amount" column in the sample inventory form on page 11.

I. Figuring costs:

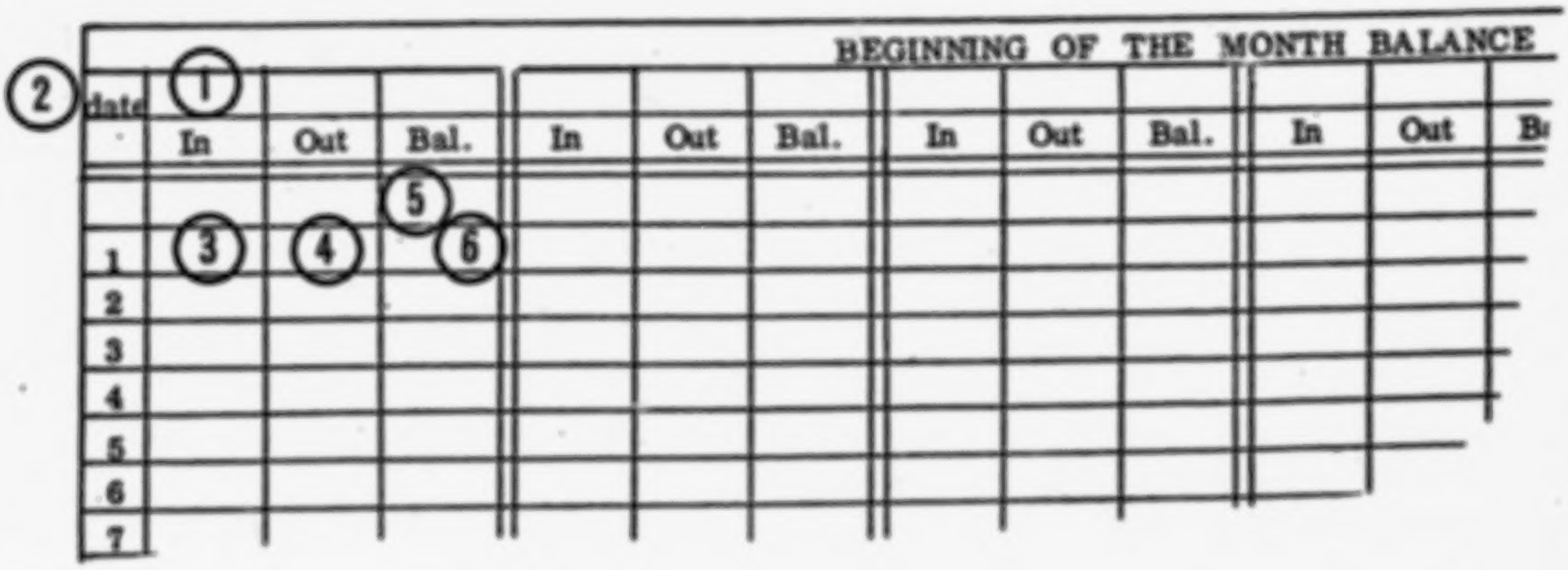
The invoice is the all important instrument in knowing what any item in stock costs. These invoices are the bills sent by the company from which the merchandise items were purchased.

Invoices should be filed in the office so that these prices can be determined quickly and easily.

J. Perpetual inventory:

This is an inventory record that is adjusted daily for sales of all items and purchases of items as they are received by the company. This record is kept at the end of each day's business from the sales slips that were made and from invoices of any merchandise received. This perpetual inventory record should be checked periodically with a physical count of merchandise.

FIGURE 2. PERPETUAL INVENTORY



1. The space at the top of the "in, out, balance" column is for listing the item, such as soybean oil meal, on which the perpetual inventory is being kept.

2. One line is provided for each day of the month.

3. The "in" column is for recording items received by the business.

4. The "out" column is for recording items that have been sold by the business.

5. The "balance" on hand at the beginning of the inventory period is recorded in this space.

6. The "balance" column is for keeping a daily record of the amount of the item on hand.

K. A procedure for ordering and receiving new items:

As the merchant sells his stock it becomes necessary for him to purchase new items from his suppliers. If he is wise he will do this in time to receive the new items before his stock is depleted.

A well-planned procedure for ordering and receiving merchandise will insure that the right kind and amounts of items are received when they should be. Proper records of items ordered and received will prevent paying for items not received or paying for items more than once.

Example: To help understand the procedure for ordering and receiving merchandise follow the steps in the example listed below. A field trip to a local place of business where these steps can be observed will help in learning the process. (Note: Not all merchants follow all of the steps given in the example or use forms of this type.)

The "Farm Supply Company" of Farmer, Ohio, ordered 18,000 pounds of 5-20-20 fertilizer to be delivered by rail in 225-80 pound bags from the "Grow More Chemical Company" of Metropolis, Ohio.

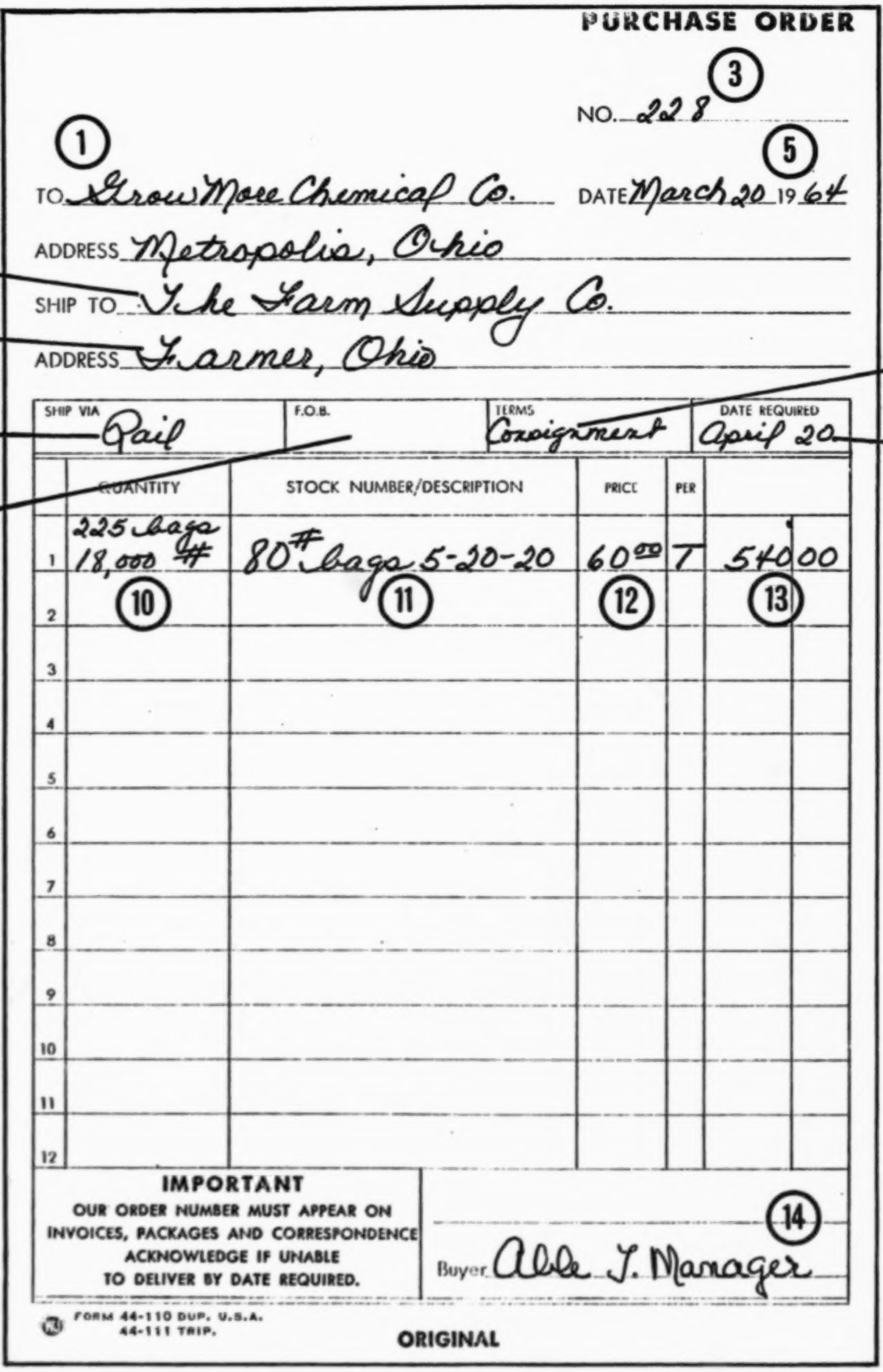
The steps listed below were followed in ordering and receiving the fertilizer. The forms used are illustrated in Figures 3, 4, 5, and 6.

Step 1. Ordering the merchandise.

(1) The purchase order:

The Farm Supply Company manager anticipated the need for more 5-20-20 fertilizer and instructed his secretary to prepare a purchase order for the fertilizer. The original was sent to the Grow More Chamical Company office. The duplicate will be used in checking the materials, the invoice and the bill of lading when the fertilizer is received.

Figure 3.


1
2
3
4
5
6
7
8
9
10
11
12
13
14

PURCHASE ORDER

NO. 228

TO Grow More Chemical Co. DATE March 20 1964

ADDRESS Metropolis, Ohio

SHIP TO The Farm Supply Co.

ADDRESS Farmer, Ohio

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED
Rail		Consignment	April 20

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1	225 bags 18,000 #	80# bags 5-20-20	60 00	T	540	00
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

OUR ORDER NUMBER MUST APPEAR ON INVOICES, PACKAGES AND CORRESPONDENCE ACKNOWLEDGE IF UNABLE TO DELIVER BY DATE REQUIRED.

Buyer Able T. Manager

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

The purchase order form is not used by all companies but is very useful. It outlines between the purchaser and the seller all the terms of the sale. Many misunderstandings may be prevented by using a purchase order. The information given on the form is illustrated in Figure 3.

1. The name of the company to which the order is being given.
2. The name of the company making the purchase.
3. Purchase order number.
4. Where the merchandise is to be shipped.
5. The date the order is written.
6. How the merchandise is to be shipped.
7. Who is to pay the freight.
8. The terms of payment.
9. The date the merchandise is needed.
10. The quantity of merchandise ordered.
11. The kind of merchandise and stock number if used.
12. The price per unit of the merchandise.
13. The total cost of the order.
14. The name of the person authorizing the purchase.

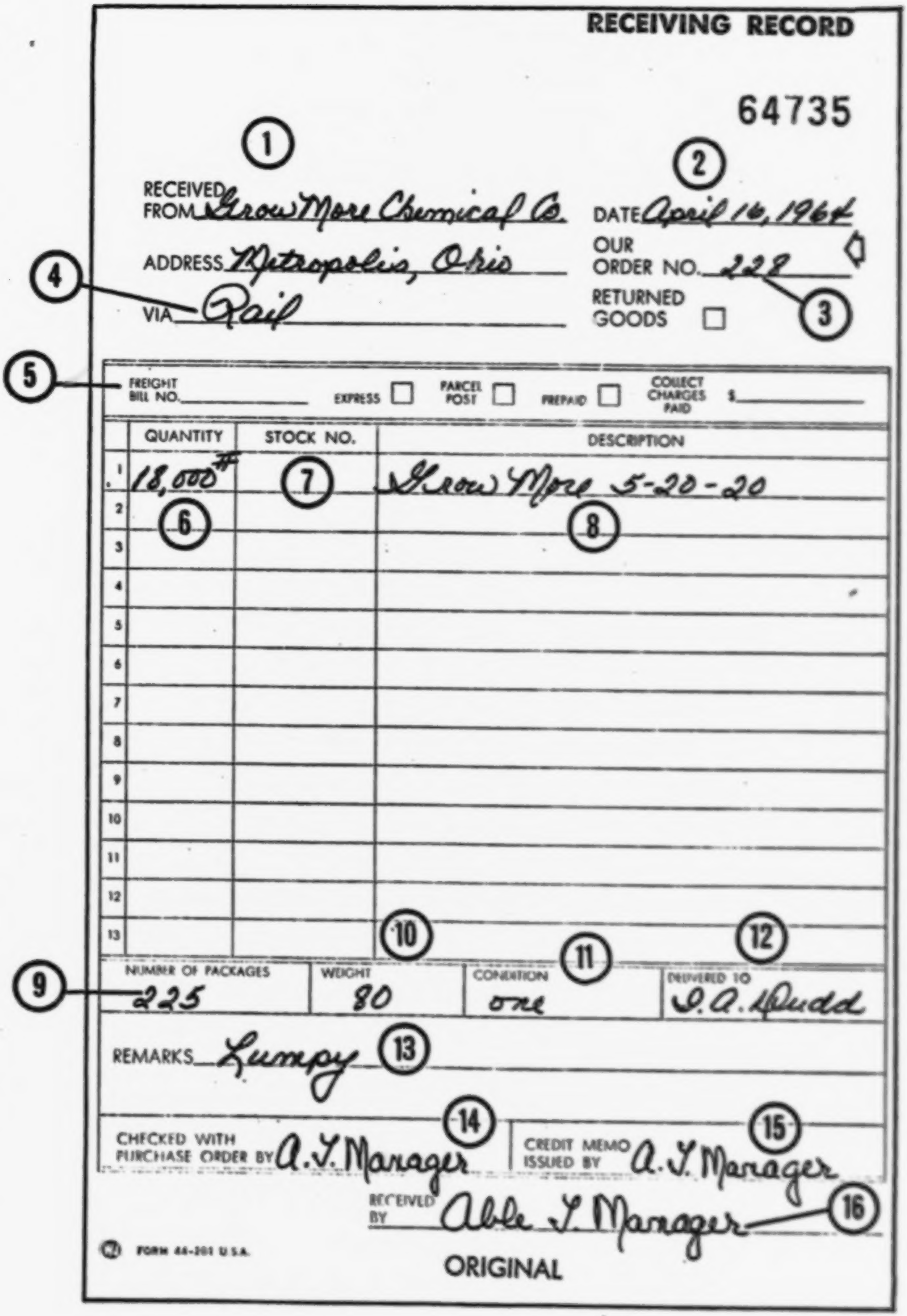
Step 2. Receiving the Merchandise.

(1) The receiving report:

When the shipment arrives at the Farm Supply Company the manager or one of his employees should check the amount and the condition of the fertilizer. Some companies will use a receiving report form for this purpose. When this form is completed it should be compared with the purchase order duplicate to see if the material received is the same as ordered. The receiving report will serve as the Farm Supply Company's own record of receiving the fertilizer. The information given on the form is illustrated in Figure 4.

1. The name and address of the company supplying the merchandise.
2. The date the merchandise was received.
3. The purchase order number.
4. The method of shipment used.
5. Record of shipping charges.
6. The quantity of merchandise received.
7. The supplier's stock number if used.
8. The kind of merchandise.
9. The number of packages received.
10. The weight of each package.
11. The condition of the packages. (one indicates no damage)
12. The employee to whom the merchandise was delivered.
13. Any unusual conditions that should be recorded.
14. The person checking the receiving record with the purchase order.
15. The person issuing the credit memo.
16. The person signing as receiving the merchandise.

Figure 4.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

RECEIVING RECORD

64735

RECEIVED FROM Grow More Chemical Co.

DATE April 16, 1964

ADDRESS Metropolis, Ohio

OUR ORDER NO. 228

VIA Rail

RETURNED GOODS ☐

FREIGHT BILL NO. ______ EXPRESS ☐ PARCEL POST ☐ PREPAID ☐ COLLECT CHARGES PAID $______

	QUANTITY	STOCK NO.	DESCRIPTION
1	18,000#		Grow More 5-20-20
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO
225	80	one	I. A. Mudd

REMARKS Lumpy

CHECKED WITH PURCHASE ORDER BY A. T. Manager

CREDIT MEMO ISSUED BY A. T. Manager

RECEIVED BY Able T. Manager

FORM 44-201 U.S.A.

ORIGINAL

(2) The bill of lading:

A bill of lading will accompany the shipment. It is used by some merchants in checking the merchandise received with their purchase order, receiving record and the invoice to see that the correct shipment was received. The information given on the form is illustrated in Figure 5.

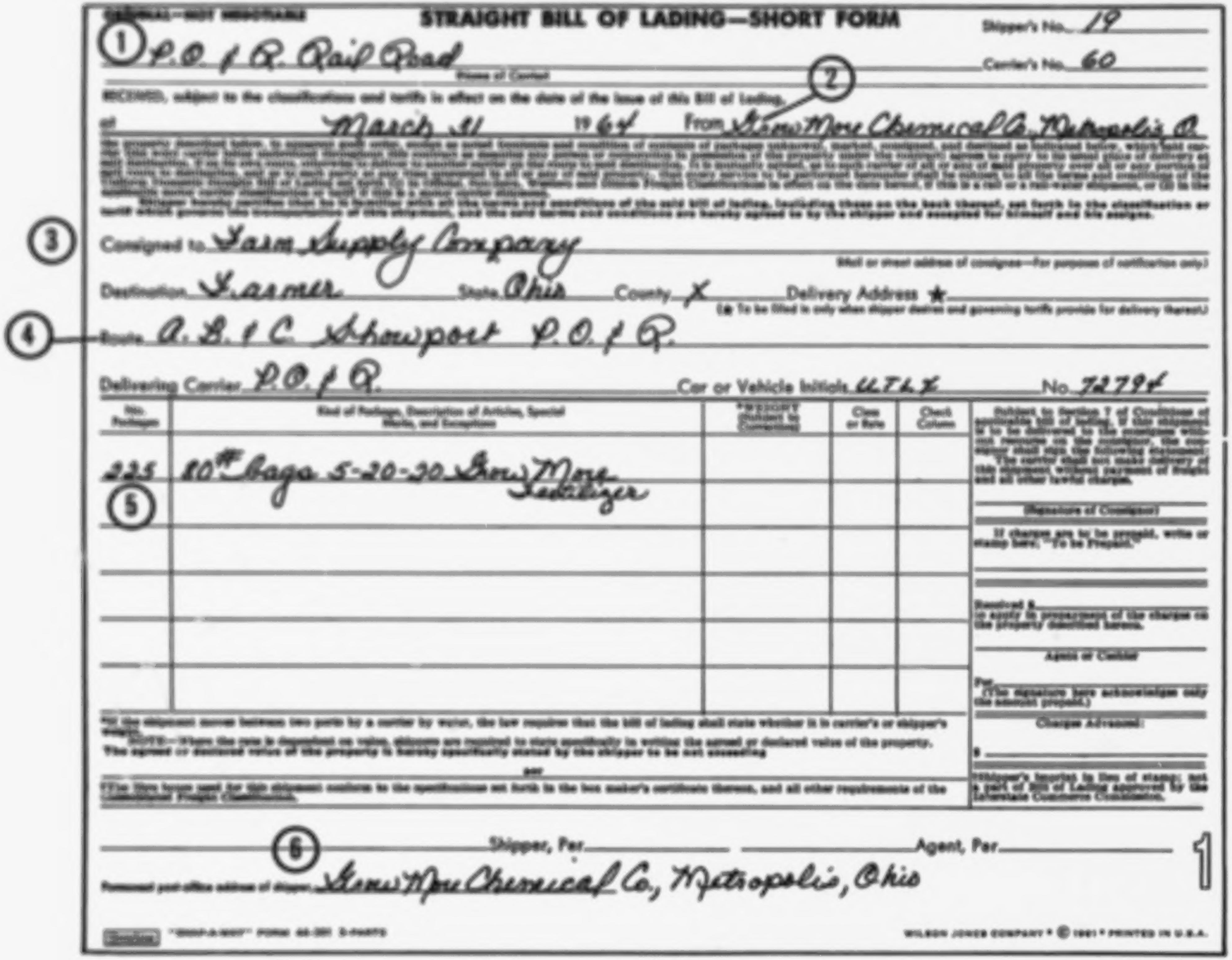
1. The name of the carrier is given.
2. The location from which the merchandise was shipped.
3. The name of the company receiving the merchandise.
4. The route over which the merchandise will be shipped and the identification of the carrier.
5. The number of packages and the description of the merchandise.
6. The address of the company shipping the merchandise.

(3) The invoice:

The shipper (Grow More Chemical Company) will prepare an invoice for the fertilizer and sent it to the receiver (Farm Supply Company). This serves as a record of the order received and of the materials that were shipped. The seller should put the information contained on the buyers purchase order on the invoice. The receiver should check the invoice with the receiving record, bill of lading and his duplicate copy of the purchase order to be sure they are being billed for the materials ordered and that the materials were received as ordered. The information given on the invoice is illustrated in Figure 6.

1. The sellers invoice number.
2. The date the invoice was prepared.
3. The address to which the merchandise was shipped..
4. The name and address of the company the merchandise was sold to.
5. The purchase order number used by the buyer.
6. The order number used by the seller.
7. The name of the seller's salesman.
8. The date the merchandise was shipped.
9. The method of shipment.
10. Who is to pay the freight.
11. The terms of payment.
12. The amount ordered.
13. The amount shipped.
14. The stock number if used and kind of merchandise.
15. The price per unit.
16. The size of unit in which the merchandise is handled.
17. The total cost of the merchandise.

Figure 5.



ORIGINAL—NOT NEGOTIABLE

STRAIGHT BILL OF LADING—SHORT FORM

Shipper's No. 19

① P.O. & Q. Rail Road — Carrier's No. 60

Name of Carrier

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading,

at March 11 1964 From ② Grow More Chemical Co. Metropolis O.

③ Consigned to Farm Supply Company

Destination Farmer State Ohio County X Delivery Address ★

④ Route A. B. & C. Showport P.O. & Q.

Delivering Carrier P.O. & Q. Car or Vehicle Initials U.T.L.X. No. 72794

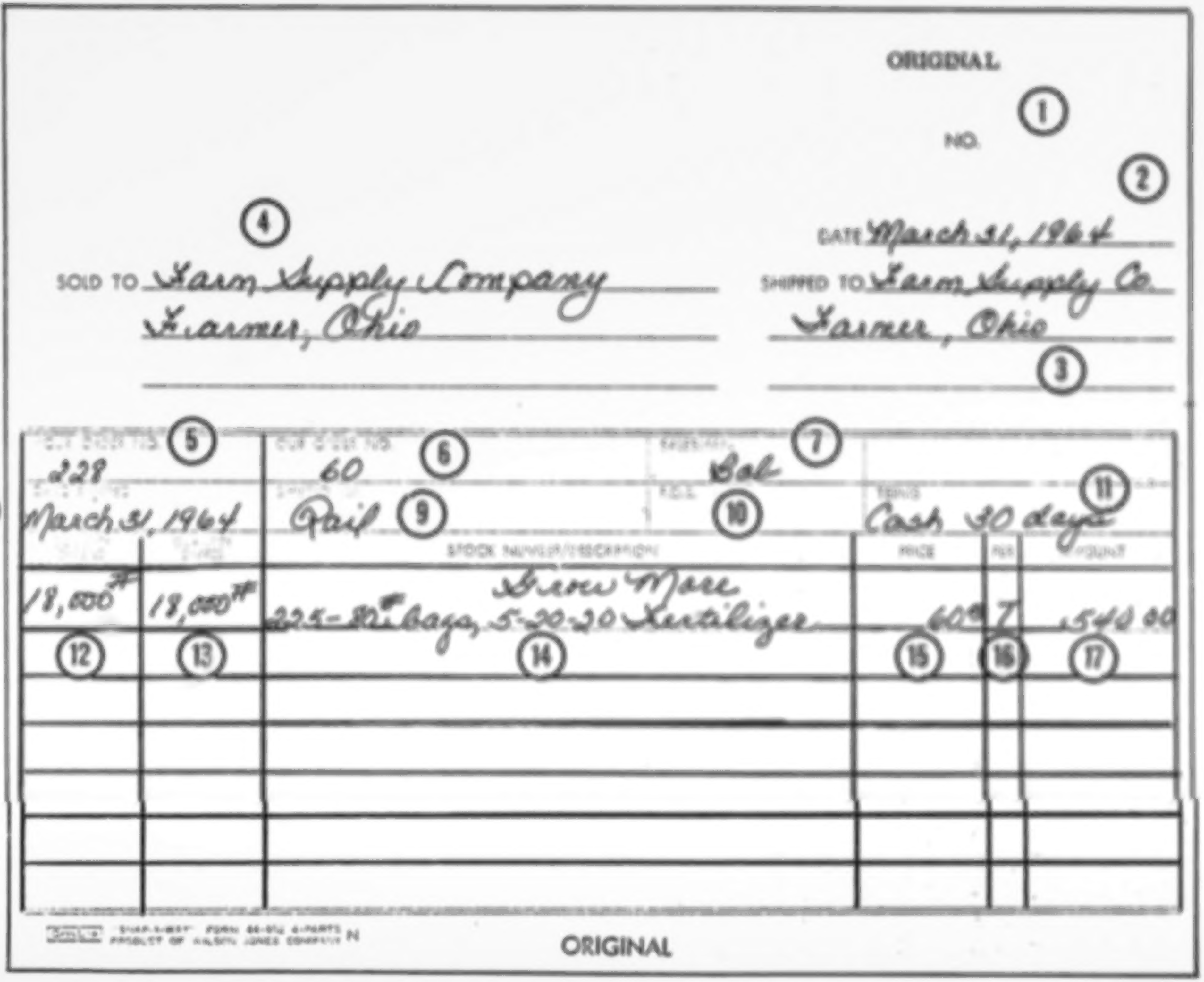
No. Packages	Kind of Packages, Description of Articles, Special Marks, and Exceptions	*WEIGHT (Subject to Correction)	Class or Rate	Check Column
225 ⑤	80# Bags 5-20-20 Grow More Fertilizer			

⑥ Shipper, Per — Agent, Per

Permanent post-office address of shipper. Grow More Chemical Co., Metropolis, Ohio

1

Figure 6.



ORIGINAL

NO. ①

②

DATE March 31, 1964

④

SOLD TO Farm Supply Company
Farmer, Ohio

SHIPPED TO Farm Supply Co.
Farmer, Ohio
③

⑧

⑤ 228		CUST ORDER NO. ⑥ 60	SALESMAN ⑦ Bob			
March 31, 1964		Rail ⑨	F.O.B. ⑩	TERMS Cash 30 days ⑪		
		STOCK NUMBER/DESCRIPTION		PRICE	PER	AMOUNT
18,000# ⑫	18,000# ⑬	Grow More 225-80# bags, 5-20-20 Fertilizer ⑭		60.00 ⑮	T ⑯	540.00 ⑰

"SNAP-A-WAY" FORM 66-912 4-PARTS N
PRODUCT OF WILSON JONES COMPANY

ORIGINAL

All employees will be involved in some phase of purchasing, receiving and inventorying the merchandise handled by their place of employment.

Exercise: To gain experience in the procedures to follow in ordering and receiving merchandise prepare the purchase orders, invoices and receiving records for the following situations. Use the blank forms that are provided. The previous examples may be used as a guide.

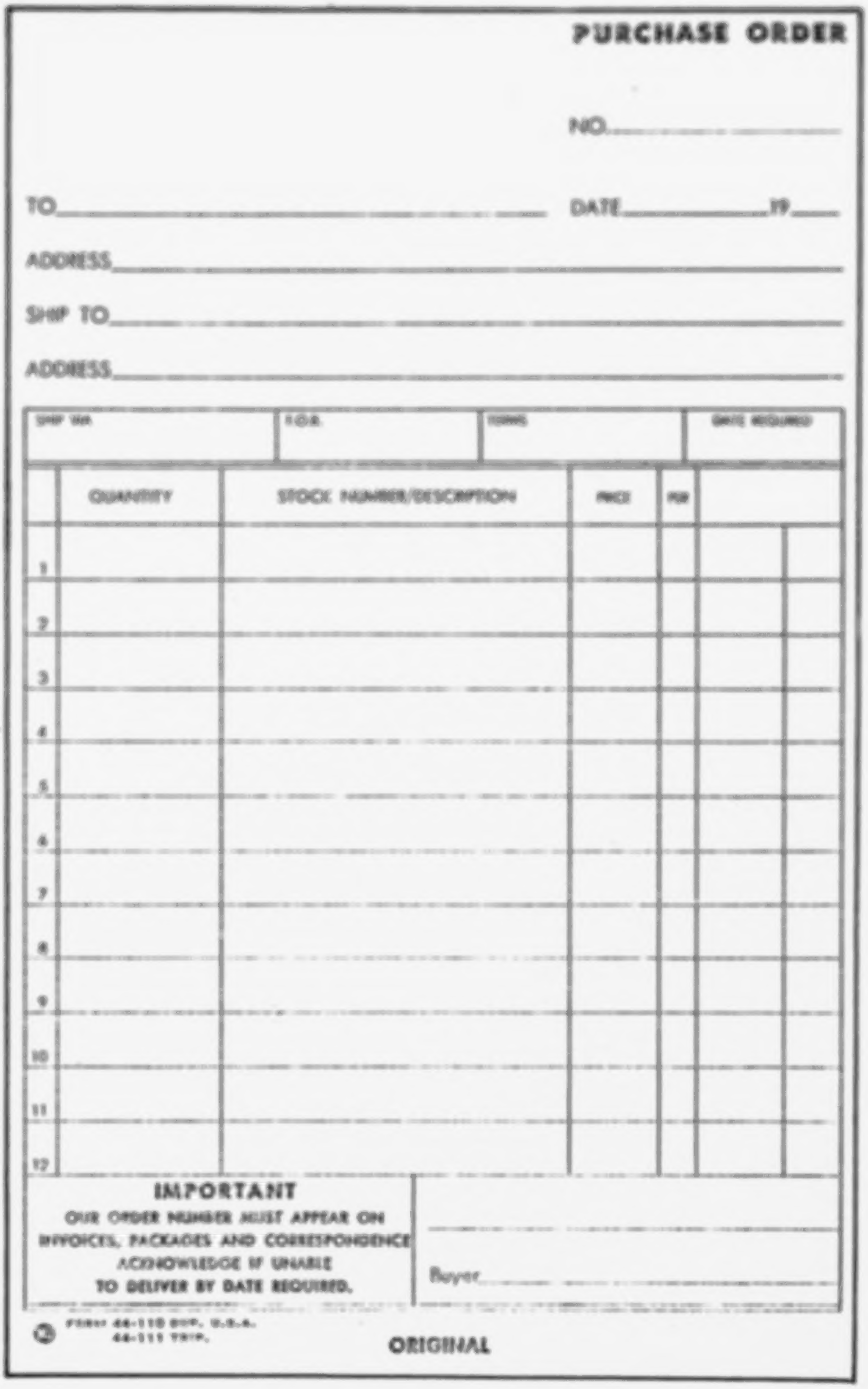
Problem 1: The ABC Farm Supply Company, Yourtown, Ohio, is buying from the Best Kind Soybean Processors, Metropolis, New York, 30 tons of soybean meal in 100# bags to be shipped by rail and delivered by May 1. The price is $65.00 per ton and is to be paid in ten days from delivery.

The ABC Company will pay the freight from New York. You are the manager and the purchase order number is 310. The salesman's name is Bob and his order number is 60.

Problem 2: The ABC Farm Supply Company, Yourtown, Ohio, is buying from Well-Known Drug Suppliers, Metropolis, New York, one 50# bag of Terramycin at 15¢ per pound, one case of 24 mastitis tubes at 65¢ each, ten bottles of hog wormer at 80¢ each (1 qt.), six cans of 1# each hog lice powder at 75¢ each.

The freight is prepaid and the material will be shipped by commercial truck. The payment is to be made the 10th of the month following purchase. You are the manager, and this purchase order is number is 412. The salesman's name is Tom, and his order number is 115.

Figure 7.



PURCHASE ORDER

NO.________________

TO______________________________ DATE__________19____

ADDRESS______________________________________

SHIP TO______________________________________

ADDRESS______________________________________

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

OUR ORDER NUMBER MUST APPEAR ON
INVOICES, PACKAGES AND CORRESPONDENCE
ACKNOWLEDGE IF UNABLE
TO DELIVER BY DATE REQUIRED.

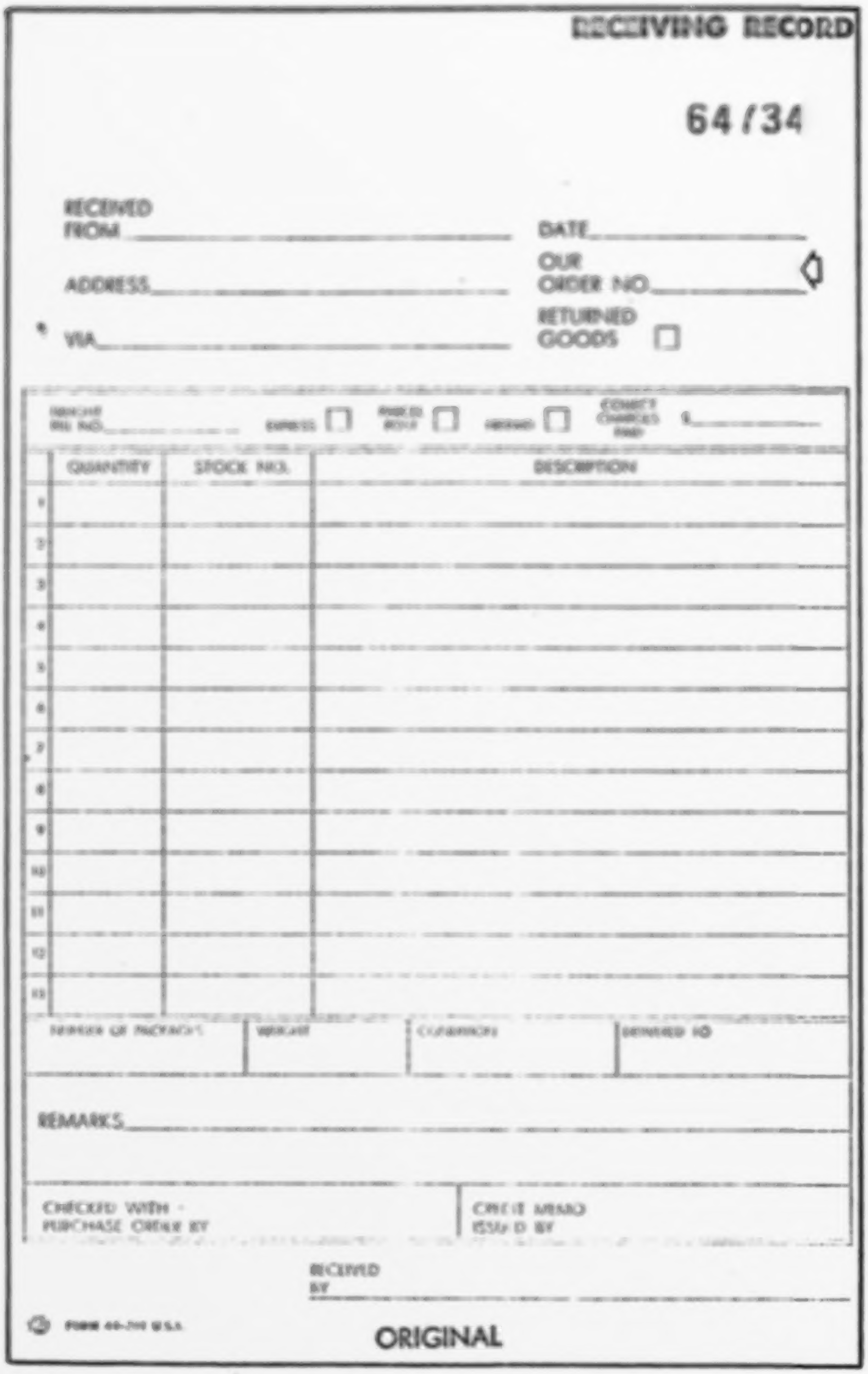
____

Buyer____________________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

Figure 8.



RECEIVING RECORD

64134

RECEIVED FROM ______________________ DATE ______________

ADDRESS ______________________ OUR ORDER NO. ______________

VIA ______________________ RETURNED GOODS ☐

FREIGHT BILL NO. ____________ EXPRESS ☐ PARCEL POST ☐ [illegible] ☐ CORRECT CHARGES PAID $ ____________

	QUANTITY	STOCK NO.	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO

REMARKS ______________________

CHECKED WITH PURCHASE ORDER BY

CREDIT MEMO ISSUED BY

RECEIVED BY ______________________

FORM [illegible] U.S.A.

ORIGINAL

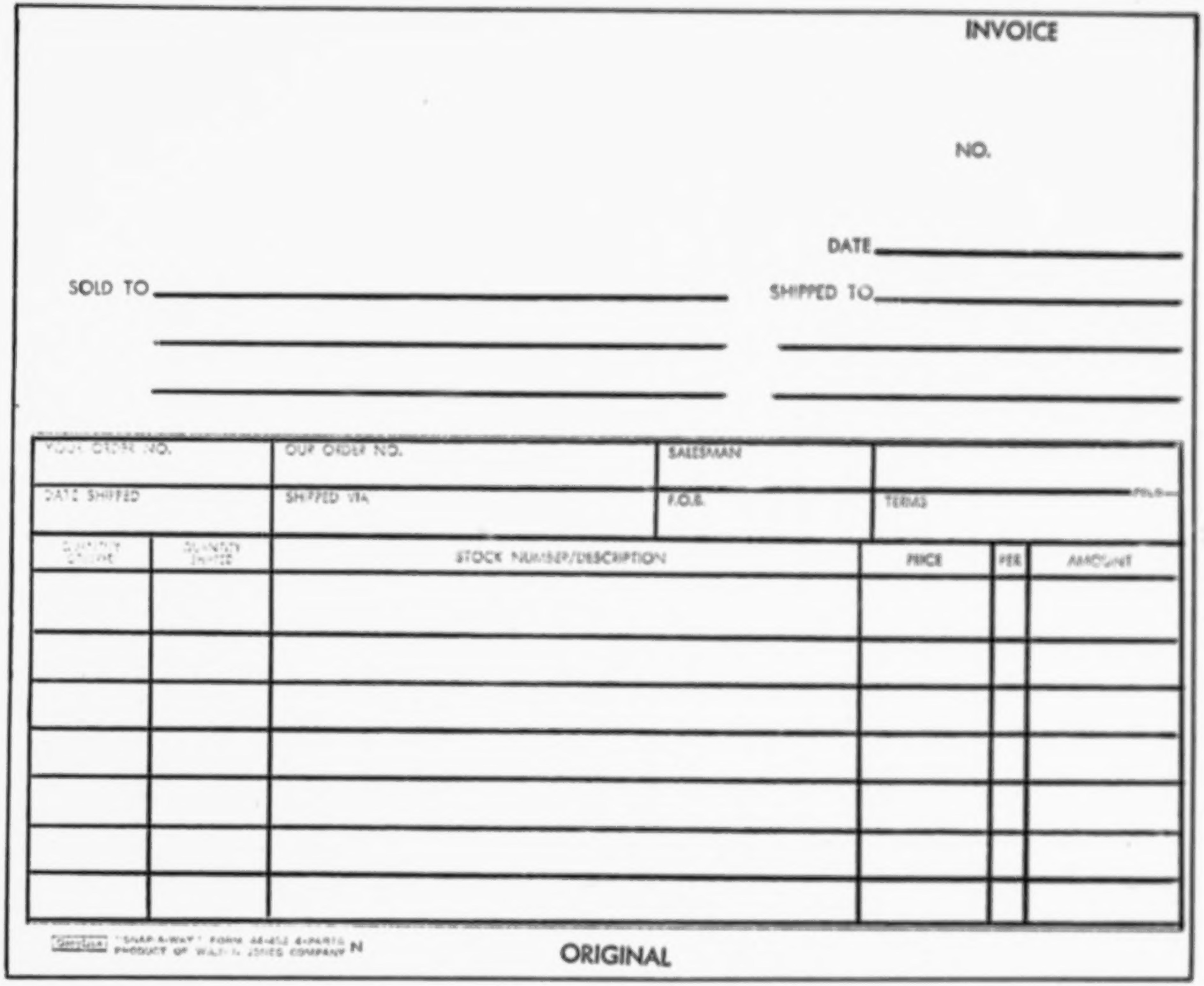


Figure 9.

INVOICE

NO.

DATE ____________

SOLD TO ____________ SHIPPED TO ____________

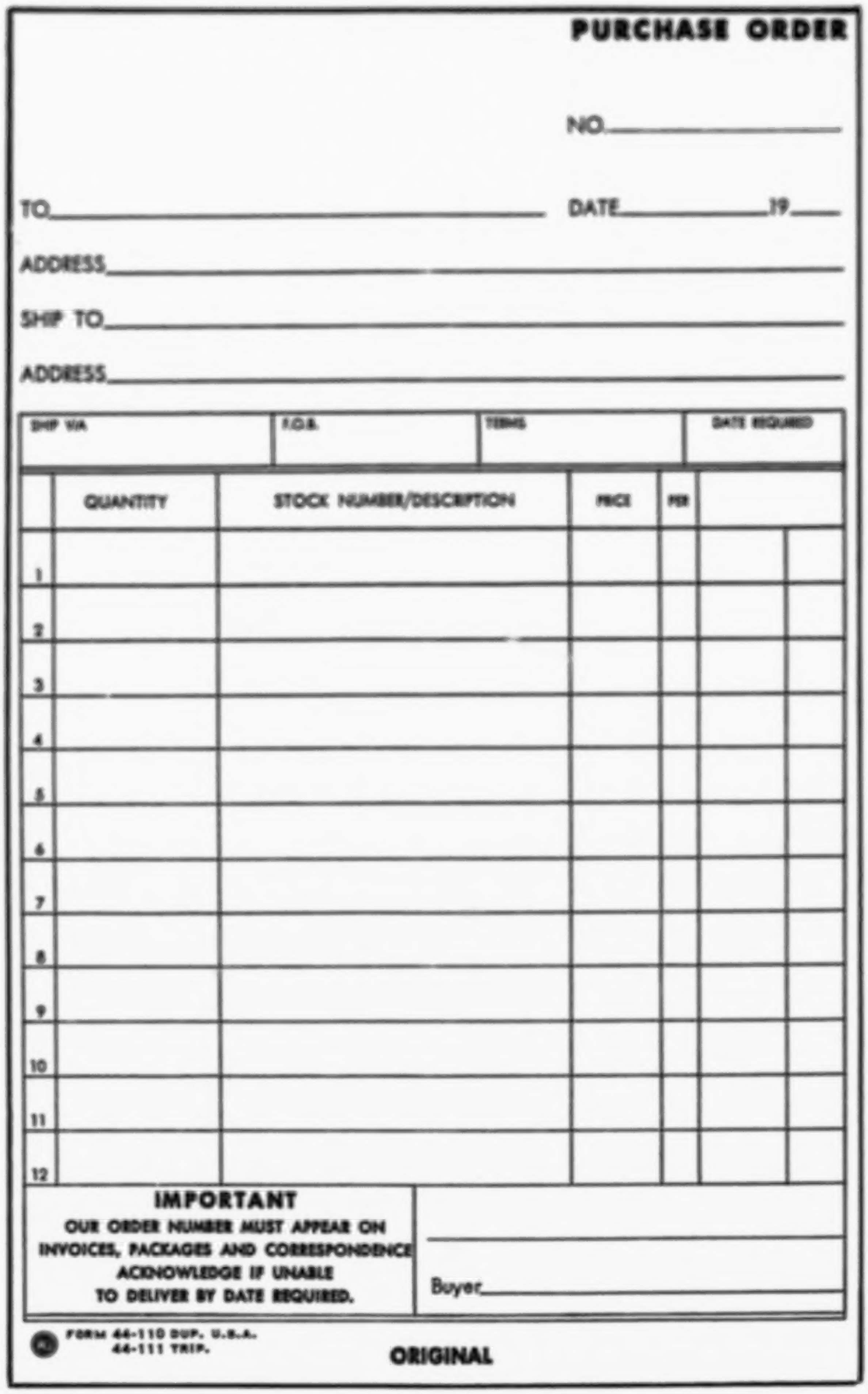
YOUR ORDER NO.	OUR ORDER NO.	SALESMAN	
DATE SHIPPED	SHIPPED VIA	F.O.B.	TERMS

QUANTITY ORDERED	QUANTITY SHIPPED	STOCK NUMBER/DESCRIPTION	PRICE	PER	AMOUNT

"SNAP-A-WAY" FORM [illegible] 4-PARTS N
PRODUCT OF [illegible] COMPANY

ORIGINAL

Figure 10.



PURCHASE ORDER

NO.____________________

TO____________________________________ DATE____________19____

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

OUR ORDER NUMBER MUST APPEAR ON INVOICES, PACKAGES AND CORRESPONDENCE ACKNOWLEDGE IF UNABLE TO DELIVER BY DATE REQUIRED.

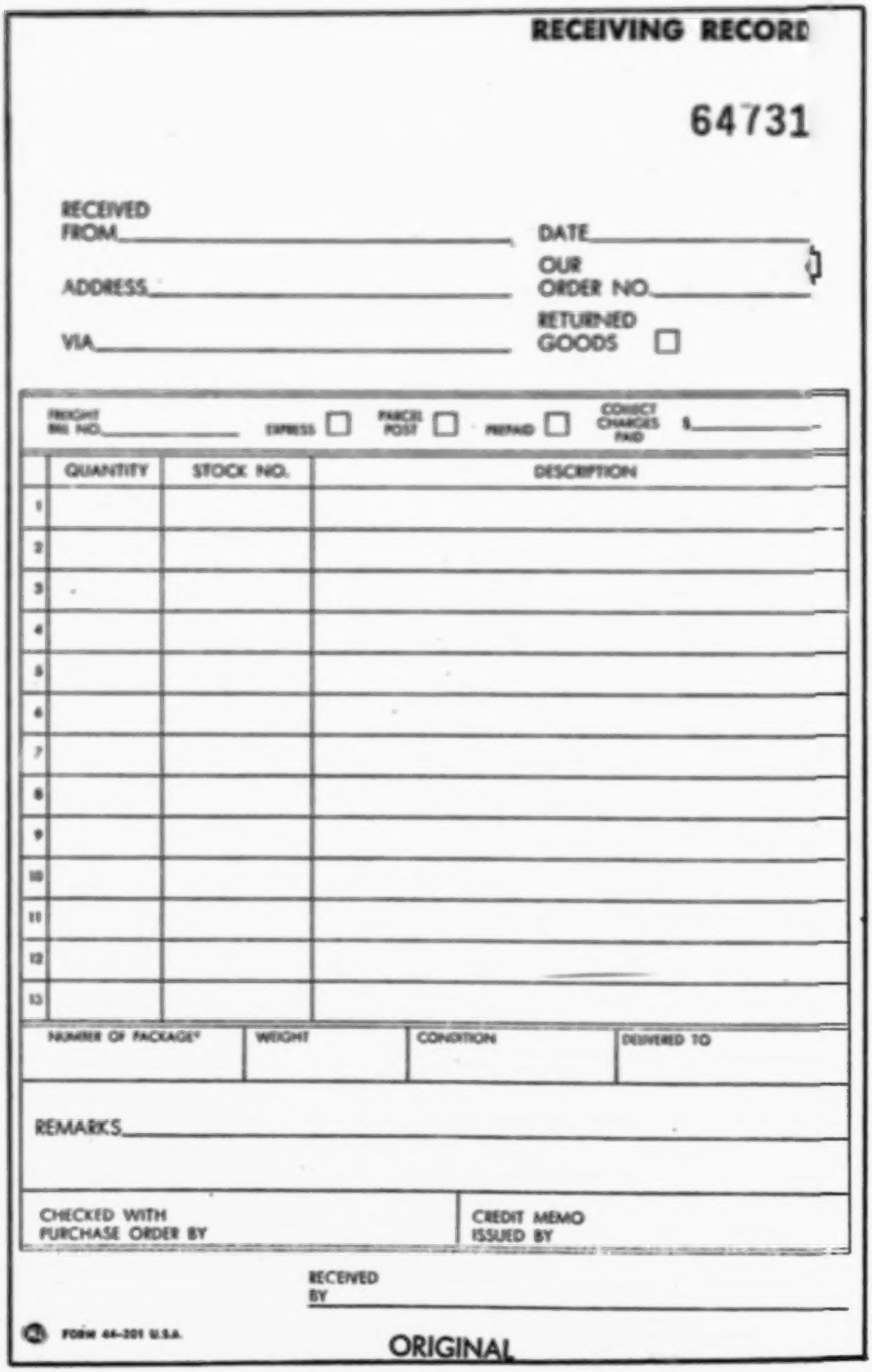
____

Buyer_________________________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

Figure 11.



RECEIVING RECORD

64731

RECEIVED FROM____________________ DATE__________

ADDRESS____________________ OUR ORDER NO.__________

VIA____________________ RETURNED GOODS ☐

FREIGHT BILL NO.__________ EXPRESS ☐ PARCEL POST ☐ PREPAID ☐ COLLECT CHARGES PAID $__________

	QUANTITY	STOCK NO.	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

NUMBER OF PACKAGES	WEIGHT	CONDITION	DELIVERED TO

REMARKS____________________

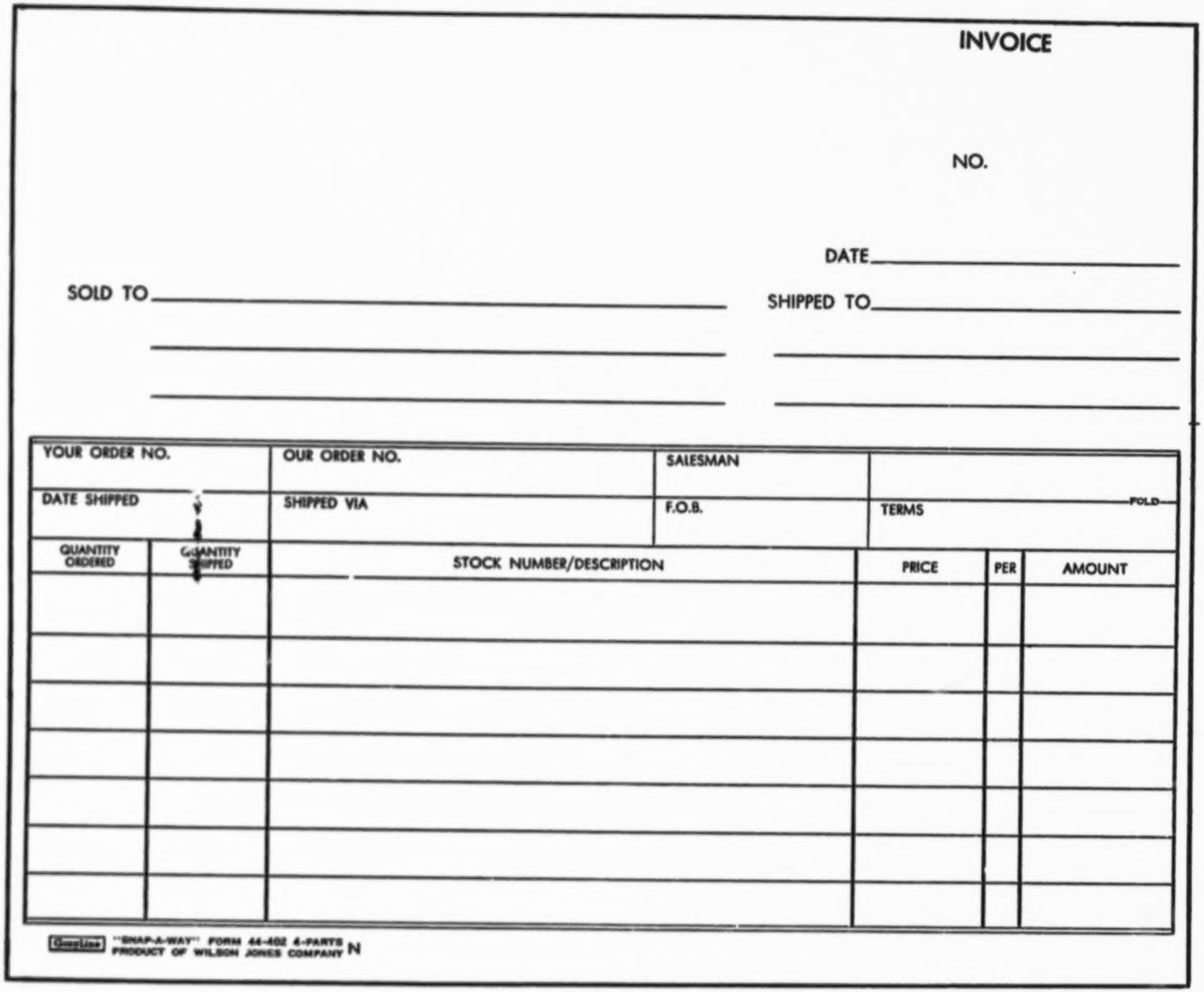
CHECKED WITH PURCHASE ORDER BY	CREDIT MEMO ISSUED BY

RECEIVED BY____________________

FORM 44-201 U.S.A.

ORIGINAL

Figure 12.



INVOICE

NO.

DATE____________________

SOLD TO____________________

SHIPPED TO____________________

YOUR ORDER NO.	OUR ORDER NO.	SALESMAN	
DATE SHIPPED	SHIPPED VIA	F.O.B.	TERMS

FOLD

QUANTITY ORDERED	QUANTITY SHIPPED	STOCK NUMBER/DESCRIPTION	PRICE	PER	AMOUNT

"SNAP-A-WAY" FORM 44-402 4-PARTS
PRODUCT OF WILSON JONES COMPANY N

Exercise: A sample monthly inventory is given in Figure 13. To become familiar with this form determine the amount for each item. For review refer to Figure 1. (Note: The class may be divided into groups so that each student will not be required to figure each item.)

Exercise: Some merchants find it is to their advantage to keep a daily running inventory form or a perpetual inventory of their stock. One type of perpetual inventory form is described in Figure 2.

Before starting the perpetual inventory problem try these sample problems. Determine the new balance after each transaction.

1. Corn ---- on hand ----- 4860# New Balance
sold ----- 1520# ----- __________
sold ----- 2340# ----- __________
bought ----- 5890# ----- __________
sold ----- 3670# ----- __________

2. Beef maker on hand ----- 5400#
bought -----10,000# ----- __________
sold ----- 1500# ----- __________
sold ----- 3000# ----- __________

3. Alfalfa seed on hand ----- 14 bu.
sold ----- 6 bu.----- __________
bought ----- 10 bu.----- __________
sold ----- 4 bu.----- __________

Now you should be ready for the perpetual inventory problem. Use the figures on page 29 to fill out the perpetual inventory form on page 30.

This is not difficult but requires concentration. You must remember whether to add or subtract. An entry added when it should be subtracted doubles the error and throws the inventory record off badly.

Inventory for month ending ______________________ 19 ______

Actual Count Different Locations			Description of Items	Unit	No. of Units	Unit Price		Amount	
	(112,	250 lb.)	No. 2 Corn	cwt.	1,122 1/2	1	82		
	(6,	850 lb.)	Oats	cwt.	68 1/2	2	20		
			FEED						
25	20	5	100# bran sack	ton	2 1/2	61	00		
30			100# mineral sack	cwt.	30	4	05		
40	30	10	50# salt blocks	ea.	80	1	05		
200	60		32% beef maker 100# sk.	cwt.	260	4	70		
100	25		40% pork maker 100# sk.	cwt.	125	4	85		
			FERTILIZER						
5,000	250		80# sacks 6-24-12	ton	210	58	50		
2,000	500	50	80# sacks 5-20-20	ton	102	58	00		
2,000	620		50# sacks 33-0-0	ton	65 1/2	61	00		
			SUPPLIES						
		120 lb.	Bluegrass seed	lb.	120		40		
		210 lb.	White clover seed	lb.	210		90		
		300 lb.	Ryegrass seed	lb.	300		12		
		40	10W 30 motor oil (5 gal.c	) can	40	5	50		
		45	Cans hydraulic oil (2 gal. c	.) can	45	1	80		
		10	Cans gear oil (2 gal. can)	can	10	1	20		
		12 car.	Tubes lube (10 each)	tube	120		20		
		20 bx.	Terramycin (4)	box	20	1	10		
		8 bx.	Terramycin (20)	box	8	5	20		
		30 bx.	(5) 25 amp plug fuse	box	30		30		
		22 bx.	(5) 20 amp plug fuse	box	22		30		
		15 gal.	Stock dip	gal.	15	2	20		
		22 gal.	Fly spray	gal.	22	1	50		
		20 gal.	2-4-D ester	gal.	20	3	00		
		30 gal.	2-4-D amine	gal.	30	2	50		
		8 gal.	Chlordane	gal.	8	6	00		
		20 box	Vegetable dust (2# box)	box	20	1	10		
		20 box	Rose-orn. dust (2# box)	box	20	1	30		
		22 ball	Baler twine	ball	22	1	50		

Enter the following items of sales and purchases on the perpetual inventory form. Keep a running Balance. Materials received are marked "in".

Date	Transaction
1	300# shelled corn
	600# beefmaker
	200# shelled corn
	500# soybean meal
	1 bale twine
2	200# porkmaker
	800# shelled corn
	1 ton porkmaker
	800# soybean meal
	2 bu. alfalfa seed
3	500# shelled corn
	600# soybean meal
	1000# shelled corn
	400# soybean meal
	2 bales twine
	12,000# shelled corn (In)
4	1 ton beefmaker
	500# beefmaker
	1 ton soybean meal
	800# soybean meal
	2 bu. alfalfa seed
5	2 ton shelled corn
	1 ton soybean meal
	2 ton porkmaker (In)
	5 ton beefmaker (In)
8	16 bales twine
	800# shelled corn
	300# porkmaker
	600# soybean meal
	500# soybean meal
	3 bu. alfalfa seed
9	5 tons soybean meal (In)
	600# soybean meal
	500# beefmaker
	10 bales twine
10	1600# beefmaker
	1200# shelled corn
	500# porkmaker
	700# shelled corn
	900# soybean meal
	50 bales twine (In)
	10 bu. alfalfa seed (In)
11	300# porkmaker
	200# beefmaker
	20 bales twine
	2 ton shelled corn
	1 bu. alfalfa seed
	10,500# shelled corn (In)
12	4500# shelled corn
	500# porkmaker
	500# soybean meal
	800# soybean meal
15	600# beefmaker
	800# porkmaker
	500# soybean meal
	1200# beefmaker
	100# soybean meal
16	10 bales twine
	500# shelled corn
	600# soybean meal
17	1 ton soybean meal
	1 ton porkmaker
	2 tons shelled corn
	5 bales twine
	3 bu. alfalfa seed
	8000# shelled corn (In)
18	10 bu. alfalfa seed (In)
	700# soybean meal
	500# beefmaker
	900# shelled corn
	400# porkmaker
	6 bales twine
19	3600# shelled corn
	1000# shelled corn
	1000# soybean meal
	1000# beefmaker
	3 ton beefmaker (In)
	3 ton porkmaker (In)
22	2200# shelled corn
	10 bales twine
	1500# porkmaker
	1000# soybean meal
	500# shelled corn
	6 bales twine
23	1 ton porkmaker
	1800# shelled corn
	500# porkmaker
	600# beefmaker
	1 ton soybean meal
24	1700# shelled corn
	500# soybean meal
	1000# porkmaker
	500# beefmaker
	5 tons soybean meal (In)
25	10 bales twine
	1000# shelled corn
	2500# soybean meal
	2 bu. alfalfa seed
26	2 tons beefmaker
	1000# porkmaker
	300# shelled corn
29	1800# porkmaker
	1600# shelled corn
	500# soybean meal
	2 bales twine
30	600# soybean meal
	1000# porkmaker
	500# beefmaker
	2 bu. alfalfa seed

FIGURE 14. PERPETUAL INVENTORY

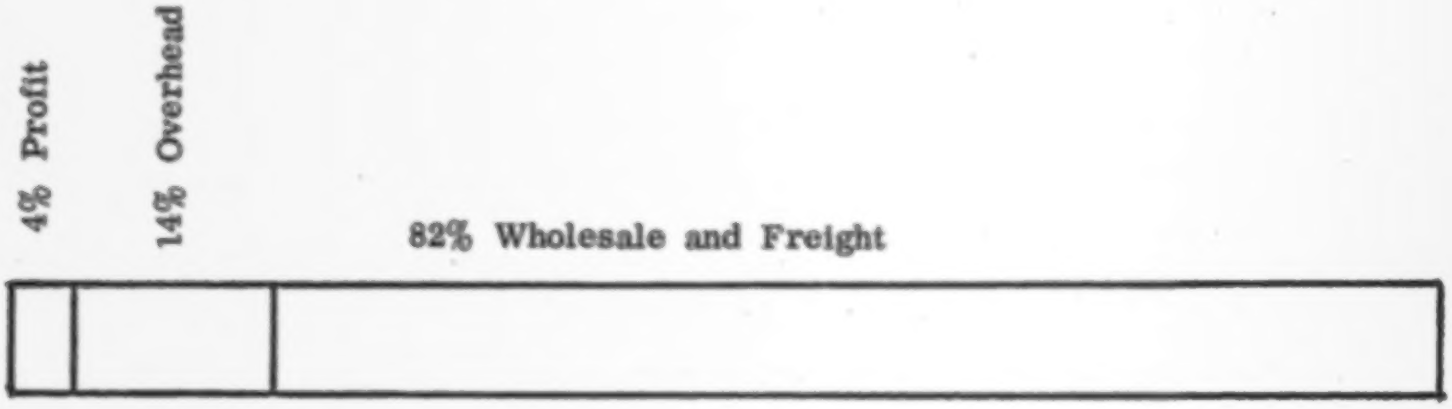
BEGINNING OF THE MONTH BALANCE

date	shelled corn			beefmaker			porkmaker			soybean meal			twine			alfalfa seed		
	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.	In	Out	Bal.
			9000#			4000#			6000#			9800#			50			12 bu.
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		
26																		
27																		
28																		
29																		
30																		
31																		

CHAPTER III: DETERMINING THE SELLING PRICE OF MERCHANDISE

The determination of the selling price of merchandise is a very important part of the management of any business. To remain in operation a merchant must know his cost of doing business and set his prices accordingly to allow a reasonable profit. The average employee will not be the person who will establish prices, but he should have some idea as to how prices are determined. This will enable him to have a better answer to the question that always comes up, "Why is the price of this so high? There must be plenty of profit in this item."

Actually the "profit" part of the selling price is only a small part of the total as is illustrated by the following graph.



It is important to examine each section of this graph.

A. Wholesale Costs and Freight Charges:

Many people forget that the merchant paid his own money to some supplier for the goods he has on hand to sell to his customers. This is the largest part of the selling price of any item.

Then there is always the item of FREIGHT CHARGES to have the item delivered to the local point. These charges must be figured into the final charges. You will remember on the purchase orders and invoices it was indicated who would pay the freight, the buyer or the seller.

On some items the freight charges might account for a large part of the cost price, while in other cases this will only be a small percentage of the cost. Freight charges are usually figured by the ton or by the hundred pounds. Large tonnages are usually shipped by rail or semi truck while small shipments are made by special delivery companies or by commercial trucking concerns.

Some Examples: The cost of a ton of coal at the mines might be $5.85 per ton. The freight charges by the railroad to deliver this to a local elevator might be as much as $4.20 per ton. This must be taken into consideration in determining the selling price of a ton of coal.

Wholesale cost	$5.85	per ton
Freight charges........	4.20	per ton
Overhead costs		per ton
Profit	_____	per ton
Selling Price		per ton

In the case of a carload of feed the cost of the feed might be $90.00 per ton and the freight charges $2.50 per ton. This is not as large a percentage of the cost of the merchandise as was the case with the coal, but it is still an item of cost that must be figured in the selling price.

Where products are handled by the hundred pound units there is usually a minimum charge for making the delivery. These charges will usually be stated like this: 50¢ per hundred pounds, $2.30 minimum. This means that they will not make any delivery for less than $2.30 but that the charges will be at the rate of 50¢ per hundred pounds for a shipment that goes over the minimum rate.

Problems: Figure the freight charges in the following cases:

1. A carload of coal with 55 tons freight
   freight rate @ $4.43 per ton .... ______________
2. A semi-load of coal from a closer mine
   17 tons @ $2.88 per ton .... ______________
3. A 30 ton carload of feed @ $2.50 per ton .... ______________
4. A 15 ton semi-load of feed @ $2.10 per ton .... ______________
5. Figure the freight costs on the following small
   lots of items using this schedule:

   50¢ per hundred pounds with a minimum of $2.30.

   550# ryegrass seed .... ______________

   Three 50# bags antibiotocs .... ______________

   800# bird feed .... ______________

   400# drug items...................................... ______________

   50# vegetable dust................................... ______________

   650# rock salt .... ______________

The point that has been made so far is that the wholesale cost of the merchandise and the freight charges must be part of the selling price.

B. Overhead Costs:

The retail merchant has a great many costs involved in carrying an inventory of products large enough to meet the demands of his customers. Many of these costs are easy to see,but some are hidden and difficult to control. Some of the costs the local merchant has in carrying an inventory and offering the items for sale are as follows: Discuss the following items and give an example of each in the space provided. (A local dealer may help in answering these questions.)

1. Merchandise may become obsolete before sold.

Example:____

2. Merchandise becomes shop worn.

Example:____

3. Some merchandise will be overstocked and will not sell out.

Example:____

4. The price of merchandise may drop before the stock is sold.

Example:____

5. Interest on investment on inventory items.

Example:____

6. Insurance on inventory items.

Example:____

7. The cost of warehousing the merchandise.

Example:____

8. Freight costs.

Example:____

9. Taxes on the merchandise carried on inventory.

Example:____

10. Theft of merchandise.

Example:____

11. Shrinkage of merchandise such as feed.

Example:____

12. Damage to merchandise in stock.

Example:____

13. Wages and salaries.

Example:____

The overhead costs are divided into FIXED costs and VARIABLE costs. These costs are illustrated in the following chart.

FIGURE 16. The ESTIMATED FIXED and VARIABLE COSTS of CARRYING an INVENTORY*

FIXED		VARIABLE	
Insurance per $1000	$10.00	Damage per $1000	?
		Shrinkage per $1000	?
Taxes per $1000	20.00	Obsolete per $1000	?
		Theft per $1000	?
Interest per $1000	60.00	Warehouse per $1000	?
Total per $1000	$90.00	Total per $1000	$30.00 and up

Total FIXED AND VARIABLE COST .... $120.00 or 12%

*Farm Bureau Cooperative Association, Inc, Bookkeepers School.

The variable costs particularly will differ from business to business. However, the total costs will usually average out to about the 12% illustrated in the graph in Figure 16.

How would the warehousing costs differ on fertilizer and alfalfa seed?

C Customer Service Costs:

A progressive forward looking merchant keeps in touch with improved farm methods and practices. He thus learns of newer products his farmer customers are becoming interested in. This knowledge will also enable him to advise and counsel with his customers concerning their need for his products and how they may be used to the best advantage by the farmer.

Another service rendered by merchants is to make adjustments and repairs on products after they are sold. This insures that the customer will receive full benefit from the product he buys.

If a business is to grow it must have satisfied customers. Today's customers expect and depend on service from their merchants. At the same time, the customer must realize that the merchant must be paid, in some form, for these services if he is to remain in business and continue providing this valuable function.

List some of the services you expect from different kinds of businesses:

D. 4% Profit:

This item must be provided for in the pricing if the merchant is to stay in business. This is a legitimate part of the price of any item and the dealer is entitled to a fair profit for the service that he renders.

Profit is usually not figured as a separate item in determining the selling price. The Overhead Costs and Profit are usually combined into what is termed the "MARK-UP." This is the amount that is added to (marked up) the cost of the merchandise plus freight charges.

Over a period of years businesses have determined what this "mark-up" figure should be to cover their overhead costs and allow for a reasonable profit. This figure is generally expressed as a percentage.

From the analysis of their business records, one farm supply business has established mark-up percentages as follows:

Fertilizer	13.6%	Seed	15%
Grain	6.4%	Fence	25%
Commercial Feed	22.0%	Twine	20%
Hardware	50.0%	Drugs	50%
Miscellaneous	25.0%		

E. Mark-Up: The amount added to the cost to make the selling price.

There are two ways to express the mark-up on an item. This may be as a cash mark-up or a percentage mark-up. The dealer may say, "I am going to mark this up $1.50," or "I am going to mark this up 25%."

It is more desirable to use the percentage figure because this automatically takes care of market changes on the cost of material. For instance if the dealer is used to marking up his feed $10.00 per ton, this might be okay when the feed is costing $50.00 per ton, but it would be too low if the cost of the feed went to $70.00 (using the suggested percentage for commercial feed above).

Cost	$ Mark-Up	% Mark-Up
$50.00	$10.00	20.0%
$70.00	$10.00	14.3%

If he were figuring his selling price by using a percentage of mark-up he would add $14.00 to the $70.00 cost of the ton of feed at a 20% mark-up.

This is necessary to have more dollar margin on higher priced material because the hidden costs are greater on higher priced materials. Such things as losses from shrinkage, damage or theft are higher with the higher priced merchandise, and there is greater risk of prices dropping when market prices are at a high level.

There is a rule of thumb that is used by some businesses to determine the percentage of mark-up. This is: THE NUMBER OF TIMES AN ITEM TURNS OVER IN STOCK DURING THE YEAR TIMES THE MARK-UP SHOULD EQUAL 100.

This formula does not work perfectly with all items because of competition and inventory adjustments, but it is a good basis to start from.

F. Mark-Up on Cost or Selling Price:

This is a principle on pricing that must be decided upon in establishing selling prices. This may be one of the factors that makes the difference in the price of the same item between two different companies. A 50% mark-up on the cost price of an item may be the same as a 33% mark-up on the selling price of that same item. An example of this might be a hardware item such as a hammer.

1. Mark-up on cost: The amount added to the cost to make the selling price.

Wholesale cost of the hammer	1.00
Merchant prices hammer at	1.50
Cash mark-up	.50
Percent mark-up	

$$\frac{\text{Cash mark-up}}{\text{Purchase price}} = \frac{.50}{1.00} = 50\%$$

2. Mark-up on selling price:

Wholesale cost of the hammer.......	$1.00
Merchant prices hammer at	1.50
Cash mark-up.....................	.50
Percent mark-up	

$$\frac{\text{Cash mark-up}}{\text{Selling price}} = \frac{.50}{1.50} = 33\ 1/3\%$$

The dealer must decide which system of mark-up he wants to use.

Problem: Using the percentage mark-up listed on page 35 and figuring this as a MARK-UP ON COST, figure the selling prices for the following items.

Figure 17. Determining Selling Price

Item	Cost per Unit	% Mark-up	$ Mark-up	Selling Price
Shelled Corn	$ 1.15 bu.			
Bran	61.00 ton			
Fly Spray	1.00 gal.			
Baler Twine	6.30 bale			
10-47-12-11 Fence	1.22 rod			
Claw Hammer	1.88 each			
5-20-20 Fertilizer	58.00 ten			
Red Clover Seed	22.50 bu.			
Mastitis Treatment	.64 each			

A DEALER IN MERCHANDISE MUST MAKE A PROFIT TO STAY IN BUSINESS

CHAPTER IV: UNDERSTANDING BUSINESS POLICY

Most businesses have some policies of discounts and service charges that are used in making charges to customers. These should be written policies so that all employees understand them and the charges or discounts are applied uniformily.

Some examples of the policies are:

1. Cash discounts on purchases.
2. Carrying charges on accounts.
3. Tonnage discounts on feed and fertilizer.
4. Early season discounts.
5. Service charges such as trucking or grinding services.

A. Cash Discounts on Purchases:

This discount is used to encourage customers to pay for their purchases as they are made rather than charge them. This is a legitimate discount for the dealer to offer because it does cost money to carry charge accounts. The costs involved in carrying charge accounts are as follows:

1. A bookkeeper is required to handle account records.
2. The dealer ties up his own money in merchandise until the money comes in from accounts.
3. This may mean that the dealer has to borrow money and pay interest on it until money comes in from accounts.
4. There is a cost for statement forms, account records and postage in sending out statements at the end of each month.
5. Some money is lost in accounts that are not paid.

For these reasons it is easy to see the justification of a cash discount. These discounts are usually 1% or 2% of the purchase price.

Example: The total for a sales slip amounts to............ $28.62

2% cash discount............ .57

Amount to pay............$ 28.05

Problems: Figure a 2% cash discount on the following purchases:

$58.25 = ________ $147.89 = __________ $15.21 = __________

Figure a 1% discount on the following purchases:

$95.00 = ________ $66.80 = __________ $42.96 = __________

B. Carrying Charges on Accounts:

As was mentioned under cash discounts, it costs the dealer something to carry charge accounts. The longer these charges have to be carried by the dealer, the more it costs him. As was mentioned before, he may even have to borrow money to buy merchandise and pay interest on this borrowed money.

30 Days is Cash: This has been established over the years and is usually a practice with all businesses. This means that anything paid for within 30 days after it is purchased has no carrying charge added. HOWEVER, THERE IS NO CASH DISCOUNT UNLESS IT IS PAID THE DAY OF PURCHASE.

6% Carrying Charge: The most usual carrying charge is 6% on all accounts not paid in 30 days. This is applied to the account each month and may be stated this way instead of the 6% ---- 1/2 of 1% per month. These statements both mean the same thing as is shown in this example.

An account charged over 30 days.................. $142.80

6% per annum	1/2 of 1% per month
$142.80	$142.80
.06	.01
8.57 ÷ 12 = $.71 per mo.	1.42 x 1/2 = $.71 per mo.

It is easy to use the 1/2 of 1% per month system as the 1% can usually be figured in your head and then divided by 1/2.

Problems: Figure the carrying charges on the following balances using both systems:

6% per annum		1/2 of 1% per month	
$ 68.55	________	$ 22.80	________
15.64	________	152.90	________
580.65	________	14.81	________
52.10	________	65.00	________
88.01	________	92.60	________
210.67	________	116.90	________

C. Tonnage Discounts:

It is usually an advantage to the dealer to sell products in large amounts. This often saves handling as in the case of an order of 7 tons of fertilizer to one farm. It is more economical for the dealer to deliver this entire load to one farm rather than divide the load among three or four farmers.

Fertilizer discounts: A typical discount schedule for fertilizer might be set up as follows:

5 ton order......	$1.00 per ton discount
10 ton order......	3.00 " " "
15 tons or over...	5.00 " " "

With orders of 15 tons and over this represents a semi-load of fertilizer and would probably be delivered directly to the farm from the fertilizer plant rather than being unloaded at the dealers place of business.

Feed discounts: These discounts are usually set up on a ton basis and are usually applied only if a ton or more of one kind of feed is purchased at one time. However, some dealers might apply the ton discount if the total of the order comes to a ton or more even though there were two or three kinds of feed purchased to make up the ton. For illustration here, we will only apply the discount when the order is for one ton or more of one kind of feed.

A typical discount schedule for feeds might be as follows:

$1.00 per ton discount on orders of 1 to 5 tons.
2.00 " " " " " " 5 to 10 tons.
3.00 " " " " " " 10 tons or more.

Examples:

7 tons of fertilizer @ $58.00........	$406.00
$1.00 per ton discount	7.00
	399.00
11 tons fertilizer @ $65.00	715.00
$3.00 per ton discount	33.00
	682.00
6 tons of feed @ $92.00	552.00
$2.00 per ton discount	12.00
	540.00

Using the schedules above, figure the discounted price for the following orders of feed and fertilizer.

FEED			FERTILIZER		
2 tons @	$78.00		4 tons @	$54.00	
6 tons @	84.00		8 tons @	62.00	
1 ton @	91.00		10 tons @	59.00	
10 tons @	68.00		15 tons @	68.00	
7 tons @	80.00		18 tons @	73.00	

D. Early Season Discounts:

These discounts usually come about through the manufacturer of products so they can move them out of their warehouses and make room for more production. This might be best illustrated by the example of twine. Practically all of the twine is used in the summer, but the manufacturing companies cannot make it all in just this one season. They must produce all year to take care of the demand. Stocks pile up in their warehouses. To try to move some of this material ahead of the season, they offer some EARLY ORDER DISCOUNTS. This is true with fertilizer, seeds and many other seasonal items.

Usually the earlier the material is taken the larger the discount. This can be illustrated with a twine and a fertilizer early order discount.

50¢ per bale	December delivery	$3.00 per ton
40¢ per bale	January delivery	2.50 per ton
30¢ per bale	February delivery	2.00 per ton
20¢ per bale	March delivery	1.50 per ton
10¢ per bale	April delivery	-----------

These discounts are usually set on a delivered basis because it does not do too much good if the dealer has the order if he has to store it himself until the using season. This system spreads out the storage of products between the manufacturer, the dealer and the farmer.

These discounts are usually applied in addition to tonnage discounts so that in the case of fertilizer both the TONNAGE and the EARLY SEASON discounts would apply.

Examples: 12 ton load of fertilizer delivered in February:

12 tons @ $56.00........................$672.00
Tonnage discount ($3.00)...$36.00
Early discount ($2.00)... 24.00 60.00
$612.00

20 bales of twine @ $8.75 delivered in January:

20 bales @ $8.75...................... $175.00
January discount (40¢).............. 8.00
$167.00

Problems: Work out the prices for the following orders using both the tonnage discount and the early order discount.

TWINE		FERTILIZER	
15 bales @ $9.20 in Jan.	__________	6 tons @ $51.00 in Dec.	__________
24 bales @ 8.50 in Mar.	__________	12 tons @ 62.00 in Jan.	__________
18 bales @ 6.40 in Dec.	__________	5 tons @ 74.00 in Feb.	__________

E. Grinding, Shelling, and Trucking Charges:

These services are charged for because the dealer has a large investment in the machinery to do these jobs. There is no way to get this investment back except to charge the people who use these services.

Grinding: This charge is usually set up as so much per 100 pounds. Normal charges for this service are 10¢ or 15¢ per hundred.

Shelling: There is more variation in shelling charges. In fact in some places, if the grain is ground after it is shelled, there is no charge for the shelling, just the grinding charges. More common, however, are charges such as this:

8¢ per 100 pounds of the ear corn shelled

10¢ per 100 pounds of the shelled corn weight after shelling

Which system the dealer uses depends on which is easier for him to do; weigh the ear corn before it is shelled or weigh the shelled corn after shelling.

Trucking: In cases where the customer asks the elevator to pick up and deliver his grain for grinding or shelling there is usually a charge of something like 10¢ per hundred for this service. Here again the dealer must have an expensive piece of equipment to offer this service, and he must charge the people that use it for this service.

Examples: In the examples here a charge will be made for both shelling and grinding where it applies.

A farmer had a load of 2400# of ear corn that he wanted picked up by the elevator truck and ground. What are his charges?

Pick-up and delivery 2400# @ 10¢..........	$2.40
grinding 2400# @ 15¢..........	3.60
	6.00

Shelling charge based on ear corn weight:

A farmer brought a load of ear corn to the elevator to be shelled. The weight of the ear corn was 12,360#. What are the shelling charges at 8¢ per cwt. ear corn? .... $9.89.

Shelling charges based on shelled corn weight:

A load of ear corn which shelled out at 8340# of shelled corn was brought to the elevator by a farmer. Tha charge for shelling was at the rate of 10¢ per cwt. of shelled corn. What are the shelling charges? .... $8.43.

Problems: Figure the charges in the following cases:

4300# of grain picked up by the elevator and ground.......... ______

1680# of ear corn shelled.................................. ______

Load of corn shelled and then ground. The shelled corn weight was 2840#. This same weight was ground............ ______

Load of corn picked up weighing 3860# was shelled and charged shelling on ear corn weight. The weight of the shelled corn that was ground was 3088#.................... ______

PRICING POLICY OF THIS COMPANY

Cash Discount: 2% cash discount allowed when payment is made at time of delivery or pick-up.

Carry Charges: A charge of 6% per annum will be applied monthly on balances that are over 30 days.

Tonnage Discounts: Fertilizer: $1.00 per ton 1 to 5 tons
3.00 " " 5 to 10 tons
4.00 " " 10 to 15 tons
5.00 " " 15 tons and over.

Feed: (applies only on orders of one kind of feed)
$1.00 per ton 1 to 5 tons
2.00 " " 5 to 10 tons
3.00 " " 10 tons or over.

Early Season Discount:	Twine	Fertilizer	Seed
December delivery	50¢ per bale	$3.00 per ton	$2.00 per bu.
January delivery	40¢ " "	2.50 " "	1.50 " "
February delivery	30¢ " "	2.00 " "	1.00 " "
March delivery	20¢ " "	1.50 " "	------------
April delivery	10¢ " "	------------	------------

Grinding: 15¢ per hundred pounds.

Shelling: 8¢ per hundred pounds of ear corn.

Trucking: 10¢ per hundred pounds.

Remember: Several discounts may apply on the same sale. It is possible to have TONNAGE, EARLY ORDER and CASH DISCOUNT on the same purchase.

Deduct early season and tonnage discounts before figuring cash discount.

In figuring fractions of a cent, carry forward 1/2¢ or more and drop less than 1/2¢.

In the next three chapters of this workbook, the exercises will deal with the selling of merchandise to customers and making the charges for this merchandise.

One of the most important forms used in retail businesses is the sales ticket. It performs the following:

A. It is the heart of the accounting system.

B. It is the first record of the sale of merchandise from the business.

C. It is important to the customer for his records of expenses during the year.

Figure 18 shows an example of a sales ticket properly completed which shows the necessary information. At the end of each day, these tickets will supply the manager of the business with the following information:

1. The amount of cash taken in during tne day.
   This is used to make a daily cash balance.

2. The amount of merchandise sold.
   This is used in inventory systems.

3. The amount of sales tax collected.
   This is used for sales tax reports.

4. Information needed to charge purchases to customer's accounts.
   This is the beginning of the bookkeeping system.

5. A permanent record of sales.
   A copy of all sales tickets is filed.

This sales ticket is also important to the customer:

1. It is a record of his expenses during the year.
   These need to be kept for income tax purposes.

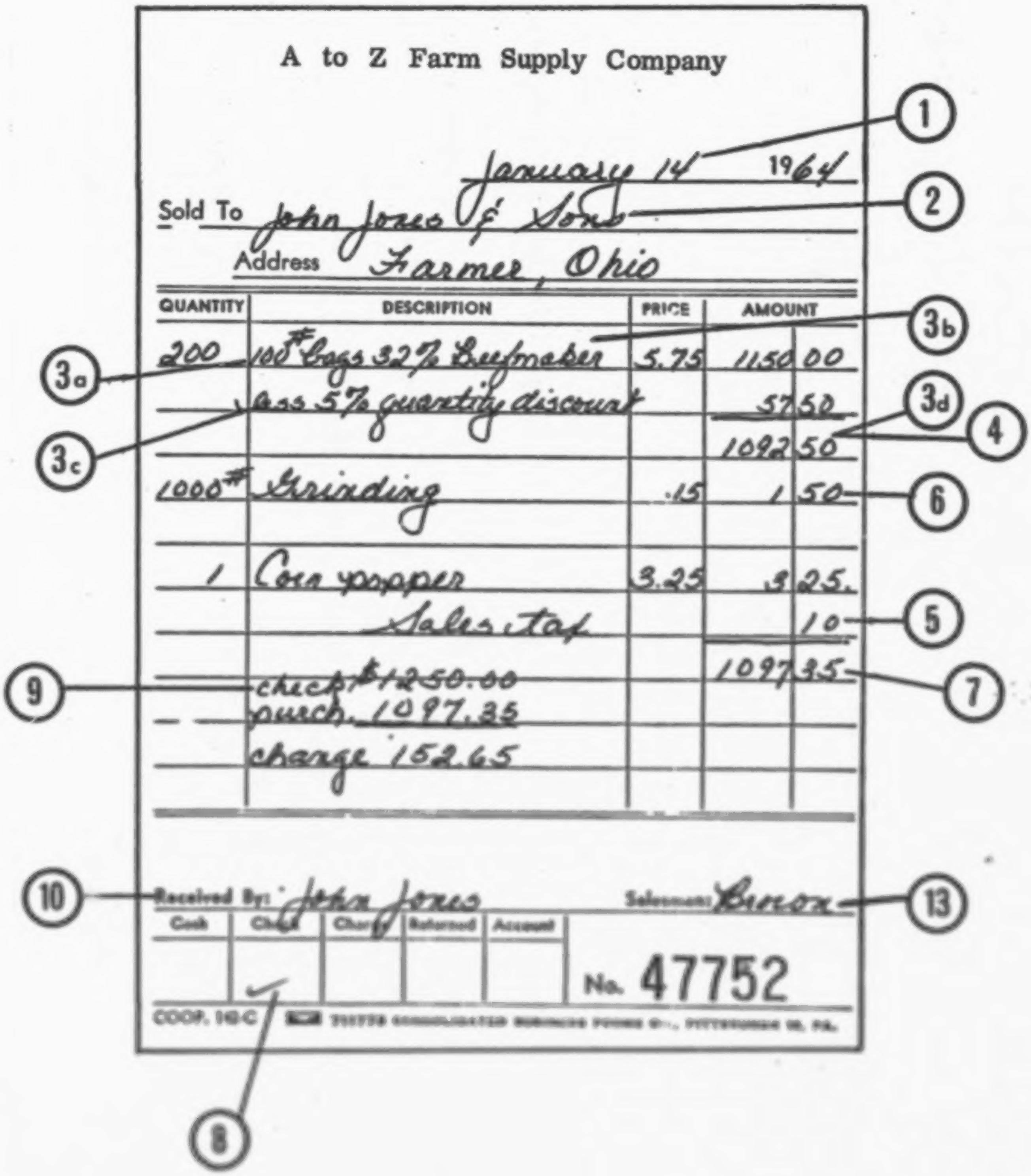
2. It is his record in cases of disputed account.
   These slips will show his purchases and payments he has made.

3. Any merchandise returned usually requires a sales ticket as evidence of purchase from that company.

Refer to the following sample to see how a sales ticket has been correctly written. (Figure 18.)

1. Mark the correct date.
2. Write the customer's correct name and address. If partnership, it should be noted as such. The name and address becomes necessary if the purchase becomes a charge account.
3. Give a complete description of each article sold.
    a. Quantity and unit should be thought of as one item. (i.e. 100 lbs.; 10 gal.)
    b. The description should clearly designate the type of merchandise being sold and not merely be a commodity classification. For example: 100# calf manna, not 100# feed. This is necessary for checking price and for inventory controls.
    c. Show the price per unit on all merchandise. (Some sales tickets will have a column heading marked "price.") Bill all merchandise at the retail price. If the customer is entitled to a discount because of volume, damage, etc., this amount is then deducted from the retail price.
    d. Extensions must be mathematically accurate and legibly written.
4. Make a sub-total of the extension.
5. Calculate the sales tax on all taxable items, if any, and enter under the first total.
6. Next, calculate any delivery, mixing, grinding or shelling charges and enter under the sales tax calculations.
7. Add the extension column to obtain the grand total charges for the sale.
8. Check the block on the ticket to indicate the method of payment, cash, check, charge, returned or account.
9. If settlement is to be made by check in an amount different from the ticket total, it is well to note the amount of the check on the face of the sales ticket with the calculation of the charge to be given. A similar calculation is recommended when a large bill is given in payment.
10. Get the signature of the person receiving the merchandise if the settlement is to be other than cash.
11. When a customer pays on account make out a sales ticket and mark what he is paying for. (i.e. fertilizer, feed, balance on note, etc., Figure 20.)
12. In all cases if an employee should ruin a ticket for any reason, the work VOID should be written across the front of the ticket and the original placed with the other tickets. Sales tickets are numbered consecutively and each one must be accounted for at the end of the day's business.
13. The salesman initials the ticket in the appropriate block.

Figure 18. Properly prepared sales tickets giving full information about the transaction will provide the manager with information he needs in conducting the business and will prevent many misunderstandings with customers if a transaction is questioned.



A to Z Farm Supply Company

January 14 1964

Sold To John Jones & Sons

Address Farmer, Ohio

QUANTITY	DESCRIPTION	PRICE	AMOUNT	
200	100# Bags 32% Beefmaker	5.75	1150	00
	Less 5% quantity discount		57	50
			1092	50
1000#	Grinding	.15	1	50
1	Corn popper	3.25	3	25.
	Sales tax			10
			1097	35
	check $1250.00			
	purch. 1097.35			
	change 152.65			

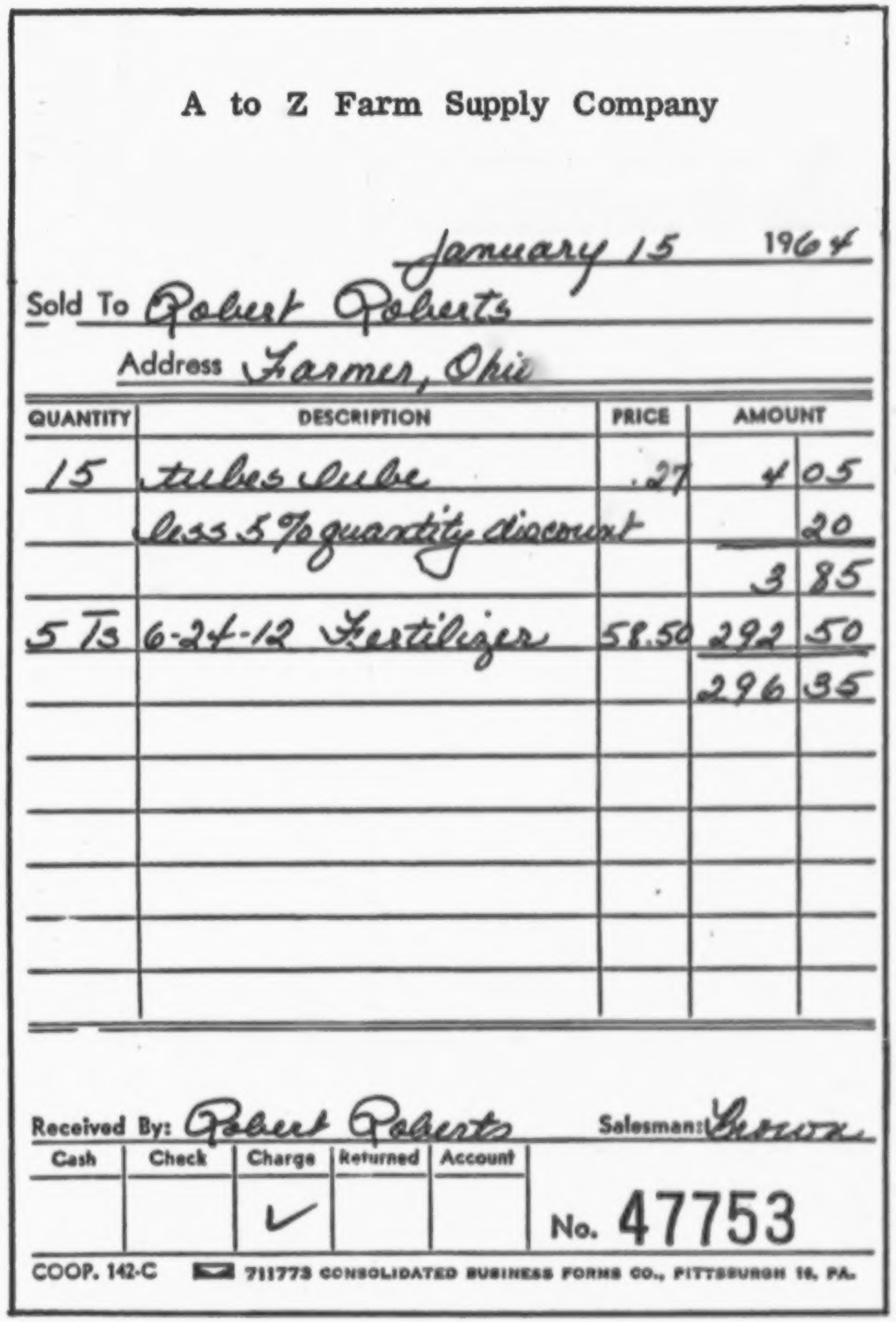
Received By: John Jones

Salesman:

Cash	Check	Charge	Returned	Account
	✓			

No. 47752

COOP. 10-C



A to Z Farm Supply Company

January 15 1964

Sold To Robert Roberts

Address Farmer, Ohio

QUANTITY	DESCRIPTION	PRICE	AMOUNT	
15	tubes lube	.27	4	05
	less 5% quantity discount			20
			3	85
5 Ts	6-24-12 Fertilizer	58.50	292	50
			296	35

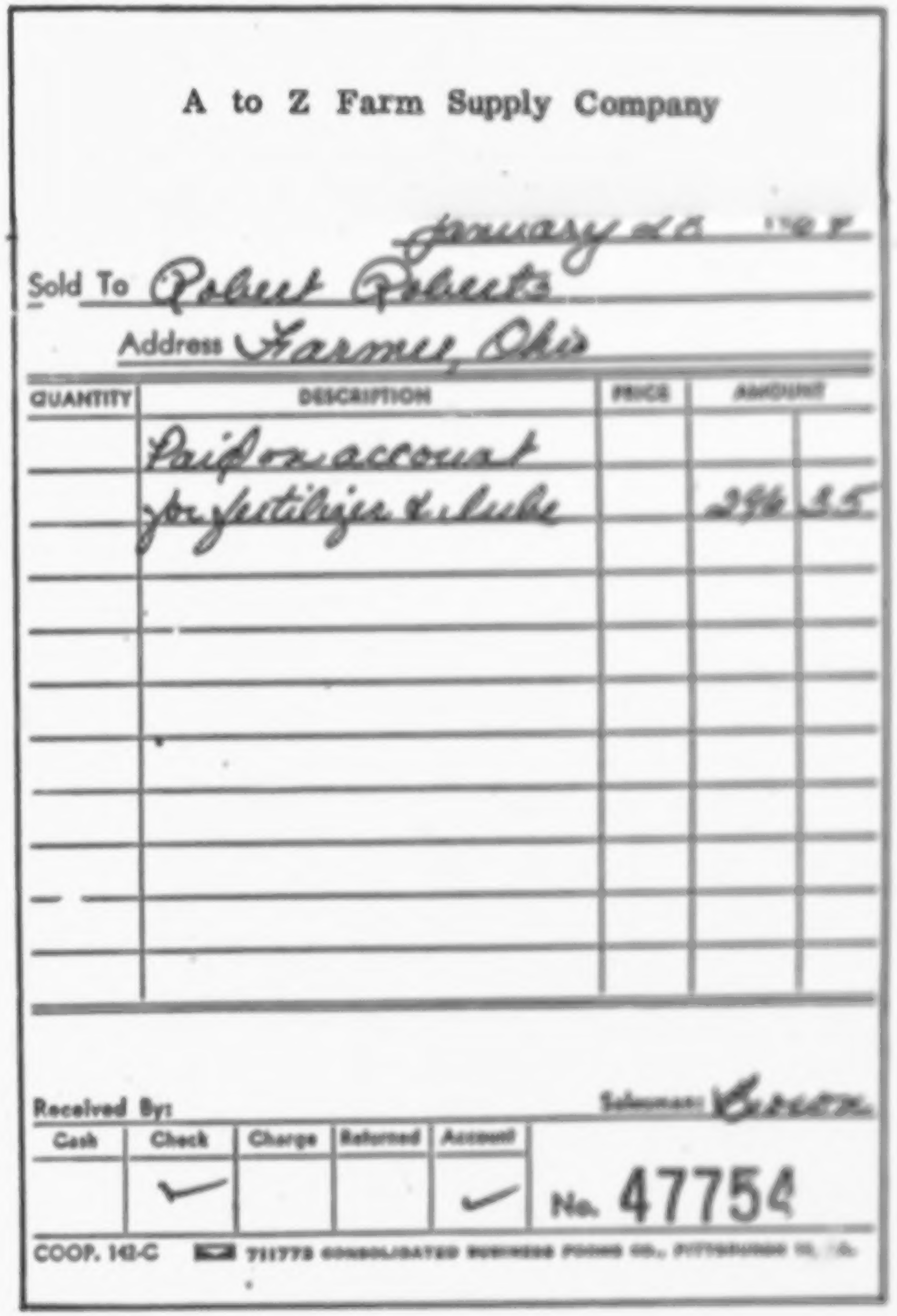
Received By: Robert Roberts

Salesman: Brown

Cash	Check	Charge	Returned	Account
		✓		

No. 47753

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.



A to Z Farm Supply Company

January 28 1964

Sold To Robert Roberts

Address Farmer, Ohio

QUANTITY	DESCRIPTION	PRICE	AMOUNT	
	Paid on account			
	for fertilizer & lube		296	35

Received By:

Salesman: Brown

Cash	Check	Charge	Returned	Account
	✓			✓

No. 47754

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.

Figures 19 and 20.

Importance of making sales tickets for merchandise:

No sale is complete until the merchandise is properly accounted for on a sales slip. The importance of this may be illustrated by a simple example. Suppose a farmer buys a ton of feed at the local elevator and he is in a hurry so he tells the employee to charge it to his account and he leaves without going to the office. The selling price of this ton of feed is $110. (The actual cost of the feed was $100 per ton and the dealer figured $10 per ton mark-up.)

If the employee forgets to make a slip for this feed and it does not get charged to the farmer's account, how many tons of this same type feed will have to be sold to make up for the loss of this one ton not being billed?

____

This may sound like an exagerated situation, but ask any local dealer if this happens in his business. It may not happen so often with the bigger purchases, but a number of small purchases may add up to as much loss as the one large item.

Let's look at a couple of other examples:

Suppose a half ton of fertilizer that sells for $72 is not billed to the customer. (The mark-up on this fertilizer is $9 per ton.) How many tons of this same kind of fertilizer will have to be sold to make up for the loss of the half ton not billed?

____

Figure that a roll of fence that sells for $36 does not get billed. (The mark-up on this item is $6 per roll.) How many rolls of fence must be sold to make up for the loss of the roll that was not billed?

________________________.

These examples illustrate the importance of getting the merchandise properly billed. Every employer will expect his employees to be very careful that this is done.

CHAPTER V: SALES TAX

There is considerable confusion about charging sales tax on products purchased in conducting the agricultural business. Where this is applicable, it is very important to the merchant that the tax be charged or the business will have to pay the amount of the tax that was not collected from the customer.

SOME STATES DO NOT HAVE: Some states do not have a sales tax and other plans vary from state to state. The Ohio plan is being explained here as this book was written in Ohio. The understanding of one plan should help the student to understand SALES TAX and then he can make adjustments for the plan in his state.

OHIO LAW: The Ohio law states that all objects of tangible personal property that are offered for sale in Ohio are subject to the sales tax except food items and drug items.

EXEMPTIONS: There are many exemptions to the above statement and this is what the student must become familiar with in order to make the proper charges in a place of business.

TAXED AT FINAL CONSUMER: The intent of the law is that products will only be charged the sales tax once. This will be to the person who buys the product for final consumption or use. So any product used in the production of an item for sale is tax exempt as long as the cost of the product is included in the selling price of a completed product. An example of this is the steel used in the production of a new automobile. The manufacturer of the car is exempt from paying the sales tax on the steel. The purchaser of the automobile is the one who pays the sales tax on the steel and other production items. Another example of this law is where fertilizer is used. in the production of flowers for sale to customers. However, an exception is where fertilizer is used for the production of vegetables in a home garden. In this case, the final consumer of the vegetables is the home gardner, and he must pay sales tax for the fertilizer. ANYTHING USED IN THE PRODUCTION PROCESS IS EXEMPT FROM SALES TAX.

SEVERAL EXAMPLES: Feed for dairy cows is exempt from the tax because it is used in a production process, while a set of electric clippers to be used in clipping cows would be subject to the tax since this clipping is not actually part of the production process of milk. It has been established that fly spray used on dairy cattle is tax exempt because the killing of flies on the cows increases milk production and is therefore part of the production process. This same fly spray used around the dwelling merely for convenience is subject to the tax since this is not a part of a production process.

Feed for all classes of livestock is exempt where the products from these animals are sold. But the feed for the family dog or riding horses is taxable. Livestock tonics, medicines, serums and the equipment or instruments to give these are tax exempt. Most hardware items are subject to the tax, but light bulbs that are used in a cage layer house to control the light to the hens and help in the production of eggs are exempt.

Liming materials used on fields for better crop production is exempt from the tax, but this same material used for lawn work is subject to the tax.

Remember -- PRODUCTS USED IN THE PRODUCTION OF PERSONAL PROPERTY FOR SALE ARE EXEMPT.

USAGE DETERMINES TAX: The use that is made of some items determines whether or not the tax must be charged. Any building materials that become part of the permanent buildings or part of the real estate are subject to the tax. The assumption here is that if it becomes part of the buildings or real estate that this is probably the final consumer of the product and that he should pay the tax.

SOME EXAMPLES: Tile used in fields which will increase the production of crops for sale are exempt from the tax. These same tile used in milk house drains or in a permanent hog house are subject to the tax.

Fencing material that is put up as permanent fence and would be sold along with the farm if it were sold as taxable. Temporary electric fence that is moved for dairy cows to increase pasture area and in turn milk production is tax exempt.

Lumber that is used to build an addition to the hog house is taxable because it becomes part of the permanent building. But the same lumber used to make a self feeder for hogs is tax exempt because this is used in the production process.

Farm machinery used in the production of crops for sale is tax exempt. The repairs for this machinery and the gas and oil for them is tax exempt. But the same gas and oil used in your automobile is subject to the tax.

Concrete materials and concrete blocks are normally taxable because these generally become part of the permanent buildings or real estate.

Holding equipment not attached to farm buildings such as dryers portable cribs, bins and bulk milk tanks used for temporary holding rather than storage are tax exempt.

Remember -- THE USE OF THE ITEM IS IMPORTANT IN DETERMINING IF IT TAXABLE.

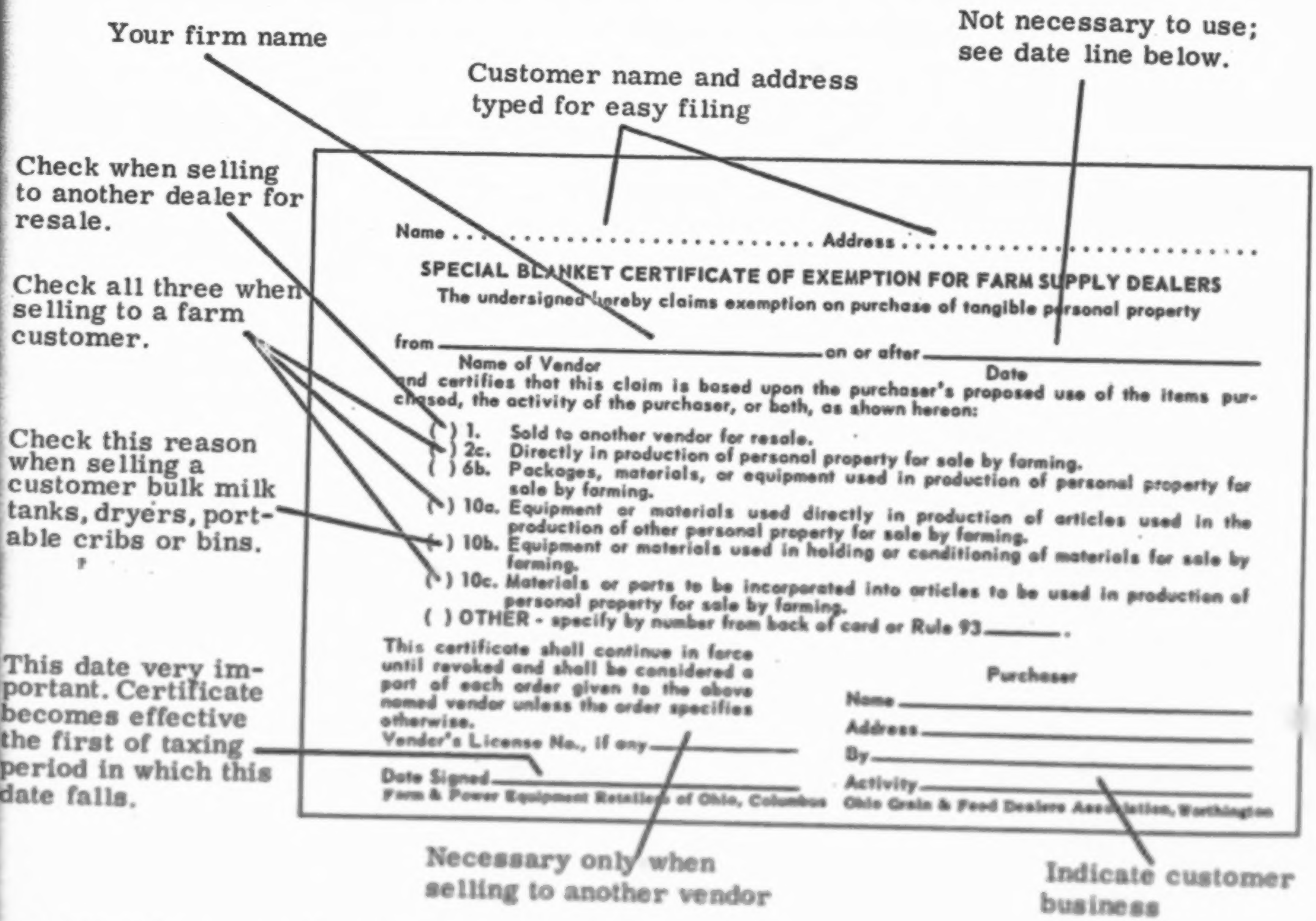
SOME ORGANIZATIONS EXEMPT: By law certain organizations are exempt from paying the tax. Some of these are: charitable and religious organizations, all government agencies including local villages, cities, states and federal agencies, schools and public utility companies.

EXEMPTION CERTIFICATES: From the preceeding examples it probably seems that the sales tax law is very complicated. This is not the case if a few points are kept clearly in mind. Remember the statement of the law from the first page. All sales are subject to the tax UNLESS there is a legal reason that they are exempt.

SALES TAX EXEMPTION CARD

Instruction Sheet

Effective with the revision of the Ohio Sales Tax Law, January 2, 1962, a new exemption card is required to protect the vendor of exempt sales. Previously, only one type of exemption was identified. Now there are five reasons why a farm customer might buy from a dealer on an exempt basis. It is a vendor's responsibility to either collect the tax on every sale or secure an exemption to show why it is an exempt sale. The exemption certificate is your protection against being charged the tax in case of an audit. The following instructions are offered to insure proper use of certificates.



Your firm name

Customer name and address typed for easy filing

Not necessary to use; see date line below.

Check when selling to another dealer for resale.

Check all three when selling to a farm customer.

Check this reason when selling a customer bulk milk tanks, dryers, portable cribs or bins.

This date very important. Certificate becomes effective the first of taxing period in which this date falls.

Necessary only when selling to another vendor

Indicate customer business

Name . . . . Address . . . .

SPECIAL BLANKET CERTIFICATE OF EXEMPTION FOR FARM SUPPLY DEALERS

The undersigned hereby claims exemption on purchase of tangible personal property

from ______________________ on or after ______________________
Name of Vendor Date

and certifies that this claim is based upon the purchaser's proposed use of the items purchased, the activity of the purchaser, or both, as shown hereon:

( ) 1. Sold to another vendor for resale.
( ) 2c. Directly in production of personal property for sale by farming.
( ) 6b. Packages, materials, or equipment used in production of personal property for sale by farming.
( ) 10a. Equipment or materials used directly in production of articles used in the production of other personal property for sale by farming.
( ) 10b. Equipment or materials used in holding or conditioning of materials for sale by farming.
( ) 10c. Materials or parts to be incorporated into articles to be used in production of personal property for sale by farming.
( ) OTHER - specify by number from back of card or Rule 93 ______.

This certificate shall continue in force until revoked and shall be considered a part of each order given to the above named vendor unless the order specifies otherwise.

Vender's License No., if any ______________

Date Signed ______________

Purchaser

Name ______________
Address ______________
By ______________
Activity ______________

Farm & Power Equipment Retailers of Ohio, Columbus

Ohio Grain & Feed Dealers Association, Worthington

Because of the complications of the present law, it is not wise to try to decide which specific exemption reason covers any particular sale. This is why we recommend checking he three basic reasons for farm use (2c, 10a, 10c) and adding 10b when necessary.

Once an exemption certificate is signed and the name and address of both customer and vendor remain the same, the certificate is valid.

Figure 21. An improved form sales tax exemption certificate.

In order to support an exemption from paying the tax, the purchaser must be responsible for signing a statement giving the reason why this purchase should not be subject to the tax. Figure 21 shows an example of an exemption certificate to be used for this purpose. This is a short form which lists the reasons that are applicable to a farm supply business.

ALL SALES ARE SUBJECT TO THE TAX UNLESS THERE IS A LEGAL REASON WHY THEY SHOULD BE EXEMPT AND THEN THIS MUST BE SUPPORTED BY A SIGNED EXEMPTION CERTIFICATE.

With this background of the sales tax law the student should get some practice in charging sales tax. The following guide may be used on computing sales tax on items costing between $ .31 and $10.40. Charge 3% on all amounts above this range.

OHIO SALES TAX RATES

Less than .31	No Tax
.31 to .40	.01
.41 to .70	.02
.71 to 1.08	.03
1.09 to 1.40	.04
1.41 to 1.70	.05
1.71 to 2.08	.06
2.09 to 2.40	.07
2.41 to 2.70	.08
2.71 to 3.08	.09
3.09 to 3.40	.10
3.41 to 3.70	.11
3.71 to 4.08	.12
4.09 to 4.40	.13
4.41 to 4.70	.14
4.71 to 5.08	.15
5.09 to 5.40	.16
5.41 to 5.70	.17
5.71 to 6.08	.18
6.09 to 6.40	.19
6.41 to 6.70	.20
6.71 to 7.08	.21
7.09 to 7.40	.22
7.41 to 7.70	.23
7.71 to 8.08	.24
8.09 to 8.40	.25
8.41 to 8.70	.26
8.71 to 9.08	.27
9.09 to 9.40	.28
9.41 to 9.70	.29
9.71 to 10.08	.30
10.09 to 10.40	.31

On the following page are some sales tax problems to be figured.

Figure the sales tax on the following items: (Tax is to be charged on all of these so you do not need to determine whether or not the tax should be charged.)

50# dog feed @ $2.45 __________

Two 50# bags of fertilizer @ $2.10 each __________

40 rods of fence @ $1.45 per rod __________

200 concrete blocks @ 18¢ each __________

Electric clippers @ $24.50 __________

Order of garden seeds @ $10.30 __________

1 qt. household fly spray @ $1.80 __________

Power lawn mower @ $145.80 __________

50# wild bird seed @ $3.25 __________

Lumber for repairs @ $62.80 __________

In the following examples determine if the tax should be charged and if so, how much the tax should be:

1000 field tile @ $54.00 per 1000 for repair of tile lines in corn field __________

Electric fence unit @ $24.50 for temporary electric fence __________

500 concrete blocks for milk house wall @ 18¢ each __________

One roll of yard fence @ $18 __________

Two rolls picket cribbing for temporary corn crib @ $7.15 each __________

20 bales of baler twine @ $8.25 each __________

5 bushels of alfalfa seed @ $28. per bu. __________

10# lawn seed @ 45¢ per lb. __________

10 tons 5-20-20 fertilizer @ $88 per ton for corn. __________

25 sewer tile @ 94¢ each for septic tank drain __________

Sales Tax -- Review

The sales tax must be collected on every sale or have an exemption certificate for the sale.

A blanket certificate of exemption means that the exemption is good for all sales to the person who signed the certificate from the date on which it was signed. This exemption applies to only the items used as stated on the exemption certificate. Such as FOR THE PRODUCTION OF TANGIBLE PERSONAL PROPERTY FOR SALE BY FARMING.

The purchaser assumes the responsibility for whether or not the tax is charged. He tells the dealer for what purpose the item is being used and this determines whether or not it should be taxed.

Do not lose a sale because a customer does not want to pay the tax, but be sure that he signs an exemption certificate and states the reason for claiming exemption on the item. This puts the responsibility on the customer.

The sales tax auditors can legally examine sales records for the past four years and collect the tax on any items during this time on which the tax was not charged. If there are no exemption certificates on file to support a reason why the tax was not charged the dealer will have to pay these tax charges.

The exemption certificates are kept on file at the place of business. The purchaser signs a certificate at each dealer where he does business. These then support the sales records of that business.

Three rules of thumb: (to determine if a sale is exempt from tax)

IS IT USED DIRECTLY IN THE PRODUCTION PROCESS?

ARE THESE PRODUCTS SOLD TO A FINAL CONSUMER?

ARE THE ITEMS USED IN PERMANENT PROPERTY
OR REAL ESTATE?

CHAPTER VI: BILLING MERCHANDISE TO CUSTOMERS

As was mentioned earlier, the billing of merchandise to customers by using sales tickets is very important to any business. Every employee of a business is charged with seeing that proper charges are made for goods sold. This chapter deals with the actual physical operation of making out sales tickets. These sales slips form a permanent record of each transaction. Companies differ in the number of copies in their sales tickets and how they file them for records.

A. Distribution of sales tickets

1. In many cases sales slips are filed in a numerical file so that each slip is accounted for. In case a mistake is made on a slip the word "VOID" should be written across the face of it and this one filed in its numerical order.

2. Usually one copy of the ticket is filed by the day's business.

3. One copy is usually filed by customer's names by cooperative businesses who need to keep patronage records.

4. The customer should always have a copy of the transaction. If he fails to pick it up at the place of business this should be sent with his monthly statement.

Sales tickets should be kept for six or seven years. (This will vary with the laws of the state.) After this time accounts can no longer be collected because of the Statute of Limitations. The statute of limitations is a law that provides a definite time in which legal action can be taken against an account or claim.

B. Preparation of the sales ticket

In spite of the importance of sales tickets many mistakes are made in their use. Some common mistakes are as follows:

1. Ticket is so poorly written it cannot be read.
2. Some merchandise is not billed when sold.
3. Price list and discount policies not followed.
4. Mistakes in addition, subtraction and multiplication.
5. All sales tickets not accounted for.
6. Customers name and address not correct.
7. Customer signature not gotten on a charge slip.
8. Sales tax not figured.

IT IS VERY ESSENTIAL:

That the customer's name be correct. It can be embarrassing to make charges to the wrong account.

That the figures on the slip are correct. Again it is embarrassing to go back to a customer and say that you made a mistake of $10 on his bill. Customers often feel that if you are careless in one thing the whole business is run carelessly.

That all merchandise be billed.

B. Some examples of different types of sales tickets

On the following pages are a few examples of sales tickets from a number of different agricultural businesses with a problem to be worked on each one. You will notice that they are printed up to specially fit the business in which they are being used.

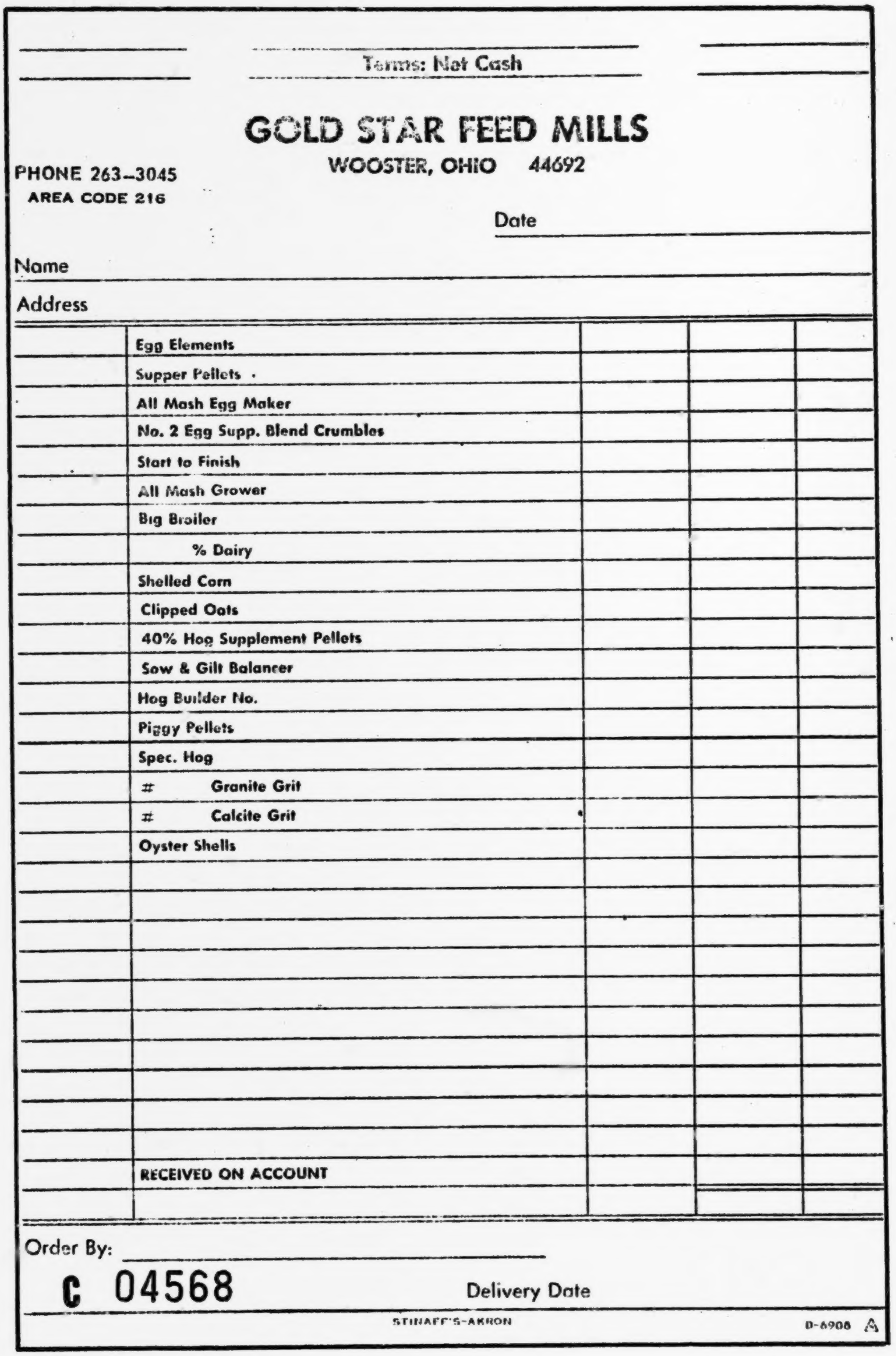
On the Gold Star Feed Mill sales ticket, Figure 22, properly enter the following information:

> On today's date Mr. John Farmer of your town had delivered to his farm and charged to his account the following items:
>
> 500# egg elements @ $4.85
>
> 300# shelled corn @ $3.25
>
> 100# clipped oats @ $3.80
>
> 200# sow and gilt balancer @ $5.60
>
> 300# piggy pellets @ $6.25
>
> Five 50# bags granite grit @ 80¢
>
> Ten bags of oyster shells @ 85¢

On the Farm Bureau Cooperative sales slip, Figure 23, enter the following information:

> On today's date Mr. John Farmer of your town brought a load of feed to the mill to be ground.
>
> He had 2340# of grain on his truck that was ground, and the grinding charge is 15¢ per hundred.
>
> To this he added: 300# of dairy supplement @ $5.40
>
> 200# of bran @ $3.25
>
> 200# of soybean meal @ $4.35
>
> 320# of molasses @ 3¢ per pound
>
> 40# of mineral @ 7¢ per pound
>
> 20# of salt (mineralized) @ 4¢ per pound
>
> He did not need the bags from the dairy supplement, bran or soybean meal so he left these with the mill man for credit at 10¢ each.
>
> He paid for this order with a check that he had with him in the amount of $84.65.

Figure 22



Terms: Net Cash

GOLD STAR FEED MILLS

WOOSTER, OHIO 44692

PHONE 263-3045
AREA CODE 216

Date

Name

Address

	Egg Elements			
	Supper Pellets			
	All Mash Egg Maker			
	No. 2 Egg Supp. Blend Crumbles			
	Start to Finish			
	All Mash Grower			
	Big Broiler			
	% Dairy			
	Shelled Corn			
	Clipped Oats			
	40% Hog Supplement Pellets			
	Sow & Gilt Balancer			
	Hog Builder No.			
	Piggy Pellets			
	Spec. Hog			
	# Granite Grit			
	# Calcite Grit			
	Oyster Shells			
	RECEIVED ON ACCOUNT			

Order By:

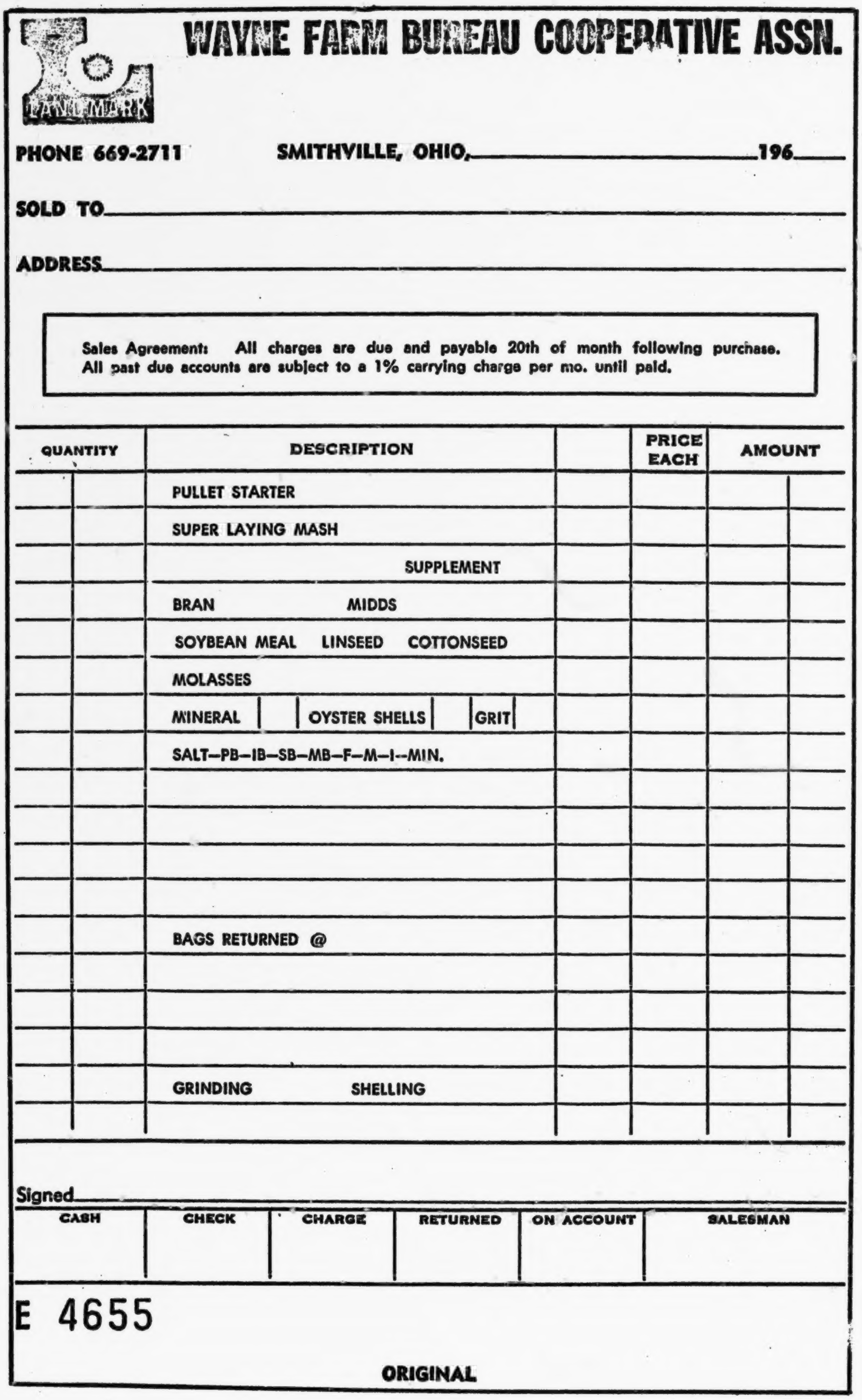
C 04568

Delivery Date

STINAFF'S-AKRON

D-6908 A

Figure 23



LANDMARK

WAYNE FARM BUREAU COOPERATIVE ASSN.

PHONE 669-2711 **SMITHVILLE, OHIO,**____________________**196**____

SOLD TO____________________________________

ADDRESS____________________________________

Sales Agreement: All charges are due and payable 20th of month following purchase. All past due accounts are subject to a 1% carrying charge per mo. until paid.

QUANTITY	DESCRIPTION		PRICE EACH	AMOUNT
	PULLET STARTER			
	SUPER LAYING MASH			
	SUPPLEMENT			
	BRAN MIDDS			
	SOYBEAN MEAL LINSEED COTTONSEED			
	MOLASSES			
	MINERAL | OYSTER SHELLS | GRIT			
	SALT—PB—IB—SB—MB—F—M—I—MIN.			
	BAGS RETURNED @			
	GRINDING SHELLING			

Signed____________________________________

CASH	CHECK	CHARGE	RETURNED	ON ACCOUNT	SALESMAN

E 4655

ORIGINAL

C. Practice and experience in writing sales tickets

Make out sales tickets for each of the transactions made by John Wilson for September and October. Use the prices indicated on the price list, and remember accuracy is important.

These are examples of transactions from a feed mill. The instructor should be able to buy a supply of sales tickets from a local feed dealer for this work.

September purchases for John Wilson:

Sept. 10 1580# grinding
300# dairy supplement
200# bran
40# mineral
20# salt
120# molasses

Sept. 12 500# shelled corn
500# grinding
100# hog supplement

Sept. 15 30 bu. Lucas seed wheat
1 1/2 ton 5-20-20 fertilizer

Sept. 18 30 tons bulk lime

Sept. 23 1640# grinding
300# dairy supplement
200# oats
40# mineral
20# salt
130# molasses

October purchases for John Wilson:

Oct. 6 1520# grinding
300# oats
300# dairy supplement
30# mineral
30# salt
125# molasses

Oct. 10 540# shelled corn
540# grinding
100# hog supplement

Oct. 15 200# rye grass seed

Oct. 18 1550# grinding
300# oats
300# dairy supplement
40# mineral
20# salt
122# molasses

Oct. 22 $200 paid on account

Oct. 29 1600# grinding
200# oats
300# diary supplement
40# mineral
20# salt
132# molasses

PRICE LIST

FEEDS

Soybean meal		$4.85
Cottonseed meal		4.70
Linseed meal		4.60
Meat Scrap		5.60
Fish meal		8.45
Bran		3.05
Middlings		3.10
32% Dairy Supplement		5.05
40% Hog Supplement		5.75
32% Steer Supplement		4.60
36% Poultry Supplement		6.05
Calf Starter	50#	2.70
Molasses	per #	.03

GRAINS

Shelled corn	2.95
Oats	2.65
Wheat	4.35

MISCELLANEOUS

Oyster shells	50#	.80
Agricultural Lime	50#	.70
Salt Blocks		.90
Mineral	50#	1.50
Salt	100#	2.50
Fly spray	1 gal.	1.20
	5 gal.	5.50
Baler Twine	per bale	9.80
Anti-Freeze	1 gal.	1.29
Grinding	cwt.	.15

3-12-12	per ton	$53.00
12-12-12	" "	71.50
5-20-20	" "	75.20
8-16-16	" "	71.60
0-20-20	" "	62.90

SEEDS:

Ranger Alfalfa	per bu.	32.00
Vernal Alfalfa	" "	38.00
Medium Red Clover	" "	28.00
Alsike Clover	" "	18.00
Mammoth Clover	" "	21.00
Timothy	" "	9.00
Rye Grass	" "	.11
Lawn Seed	" "	.75
Seed Wheat	per bu.	2.35

BULK LIME:

Per ton spread on field	5.70

DISCOUNT SCHEDULE

For ton lots of one kind of feed allow a discount of $2 per ton.
For baler twine allow 10¢ per bale discount for orders of 10 bales or more.
For bulk lime allow 10¢ per ton discount for 40 tons or more.
For fertilizer -- early order discount:
Deduct.....$3.00 per ton for December delivery
2.00 per ton for January delivery
1.00 per ton for February delivery

CHAPTER VII: MONTHLY STATEMENTS AND SERVICE CHARGES

Monthly statements are used by almost every business and are a summary or re-statement of the charges and credits made by another customer during the month.

A. The monthly statements have several advantages both from the dealers and the customers' viewpoint.

1. It serves as a reminder to the customer of the current balance that he owes the merchant. Regular payments on monthly statements helps the merchant to keep his money turning over and reduces the amount that he has tied up in "Accounts Receivable" which is not available for the operation of the business.

2. Paying by check on the amounts listed on the monthly statement is an excellent income tax record. Both the cancelled check and the statement of business support the farm expenses for the year.

3. Statements are usually made along with a permanent record that is kept on file in the place of business. In case any of the farmers business records are lost he can get this information again from the dealer if all transactions have been posted on an account card.

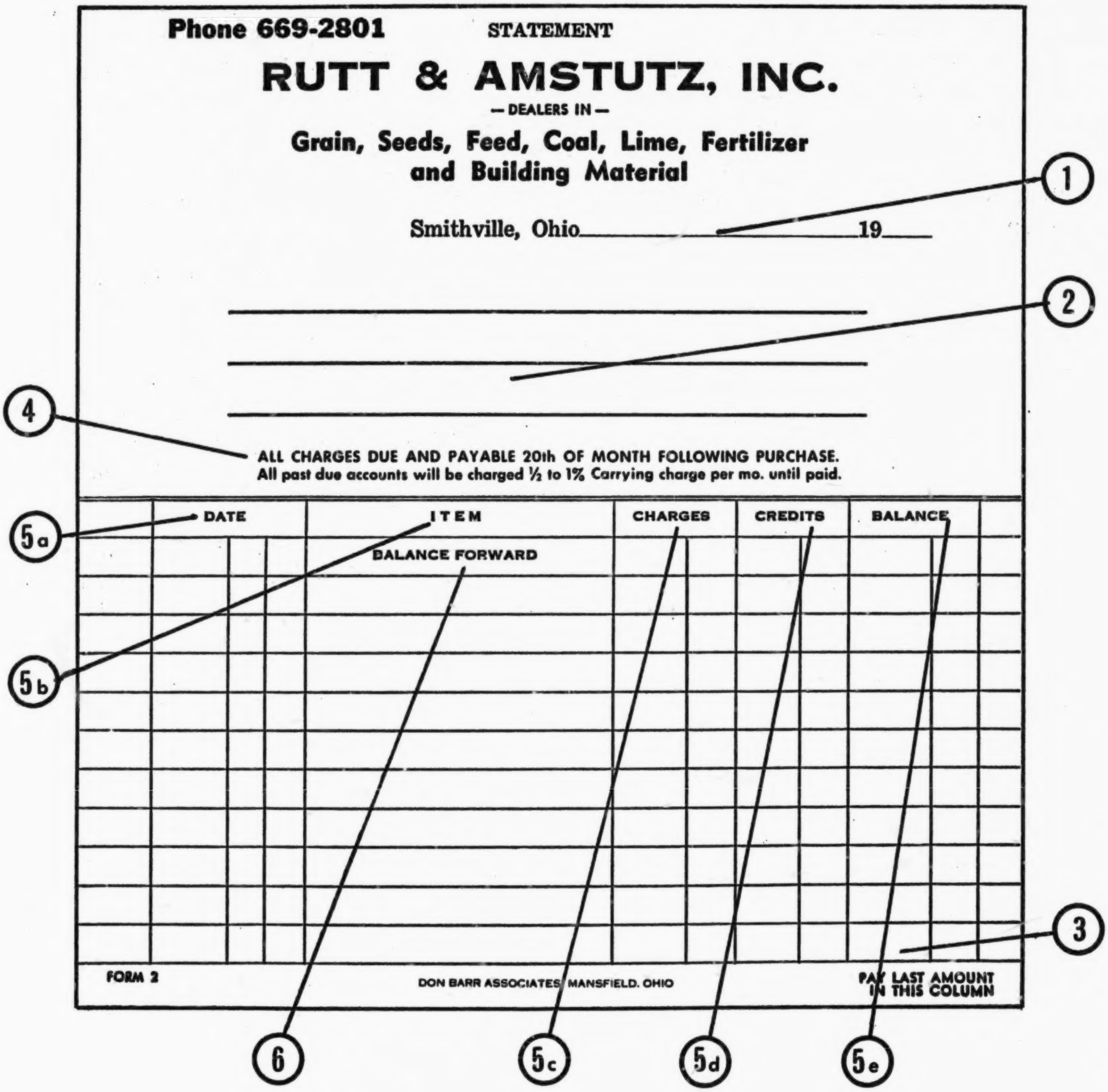
4. It is usually easier for a farmer to keep his records if all purchases are charged and paid for once a month. If some purchases are charged and some are paid for by cash it is necessary that all of these purchased items be kept track of as they are made.

5. Since statements are a re-statement of charged sales tickets, it has often been found that mistakes have been made on the original sales ticket and corrections can be made as these items are posted to the statement form. This may work to the advantage of either the farmer or the merchant.

B. Following are examples of three different type statement forms. In each case there is:

1. The date when the statement is mailed.
2. A place for the name and address of the customer.
3. A statement to pay the last amount in the balance column.
4. A statement of the service charges that are applied on account balances that are past due.
5. A column for each of five items. These are:
    a. Date
    b. Item, reference, or commodity
    c. Charges
    d. Credits
    e. Balance
6. A line for a "Balance" carried forward from the previous month.

Figure 24



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

— DEALERS IN —

Grain, Seeds, Feed, Coal, Lime, Fertilizer
and Building Material

Smithville, Ohio____________________19____

____
____
____

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

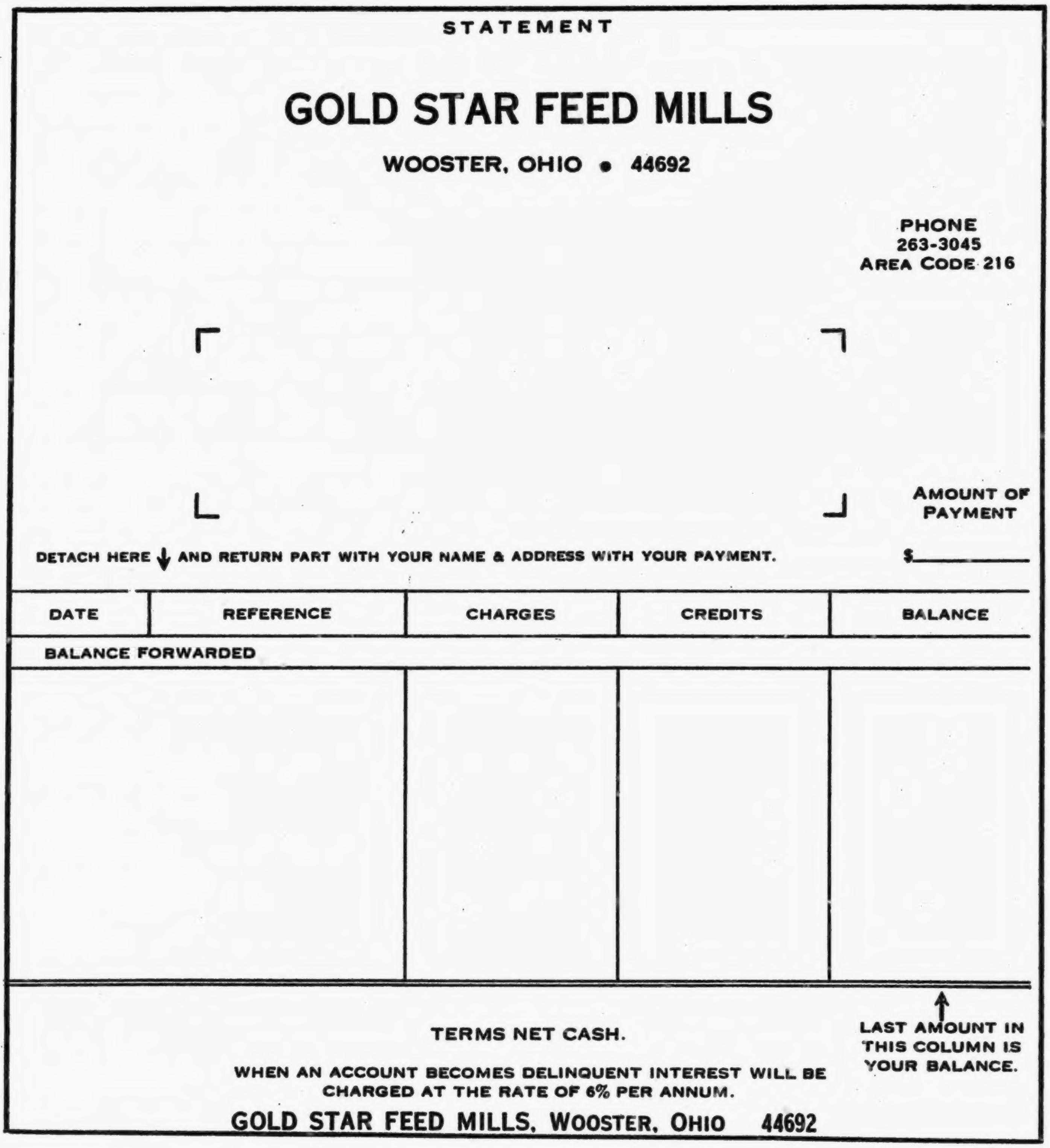
DATE	ITEM	CHARGES	CREDITS	BALANCE
	BALANCE FORWARD			

FORM 2

DON BARR ASSOCIATES, MANSFIELD, OHIO

PAY LAST AMOUNT IN THIS COLUMN

Figure 25



STATEMENT

GOLD STAR FEED MILLS

WOOSTER, OHIO • 44692

PHONE
263-3045
AREA CODE 216

AMOUNT OF PAYMENT

DETACH HERE ↓ AND RETURN PART WITH YOUR NAME & ADDRESS WITH YOUR PAYMENT.

$________

DATE	REFERENCE	CHARGES	CREDITS	BALANCE
BALANCE FORWARDED				

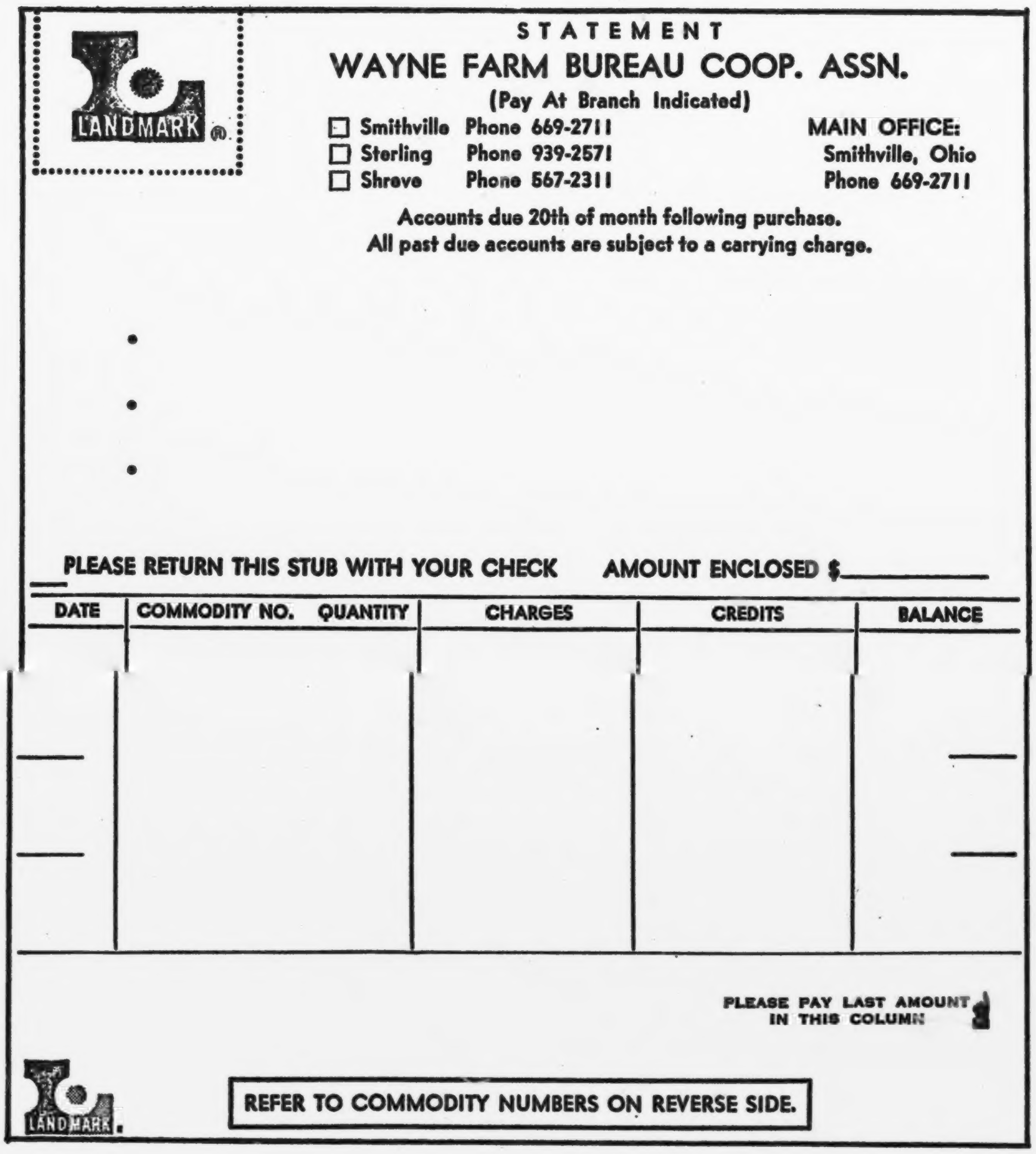
TERMS NET CASH.

WHEN AN ACCOUNT BECOMES DELINQUENT INTEREST WILL BE CHARGED AT THE RATE OF 6% PER ANNUM.

↑ LAST AMOUNT IN THIS COLUMN IS YOUR BALANCE.

GOLD STAR FEED MILLS, WOOSTER, OHIO 44692

Figure 26



STATEMENT

WAYNE FARM BUREAU COOP. ASSN.

(Pay At Branch Indicated)

☐ Smithville Phone 669-2711
☐ Sterling Phone 939-2571
☐ Shreve Phone 567-2311

MAIN OFFICE:
Smithville, Ohio
Phone 669-2711

Accounts due 20th of month following purchase.
All past due accounts are subject to a carrying charge.

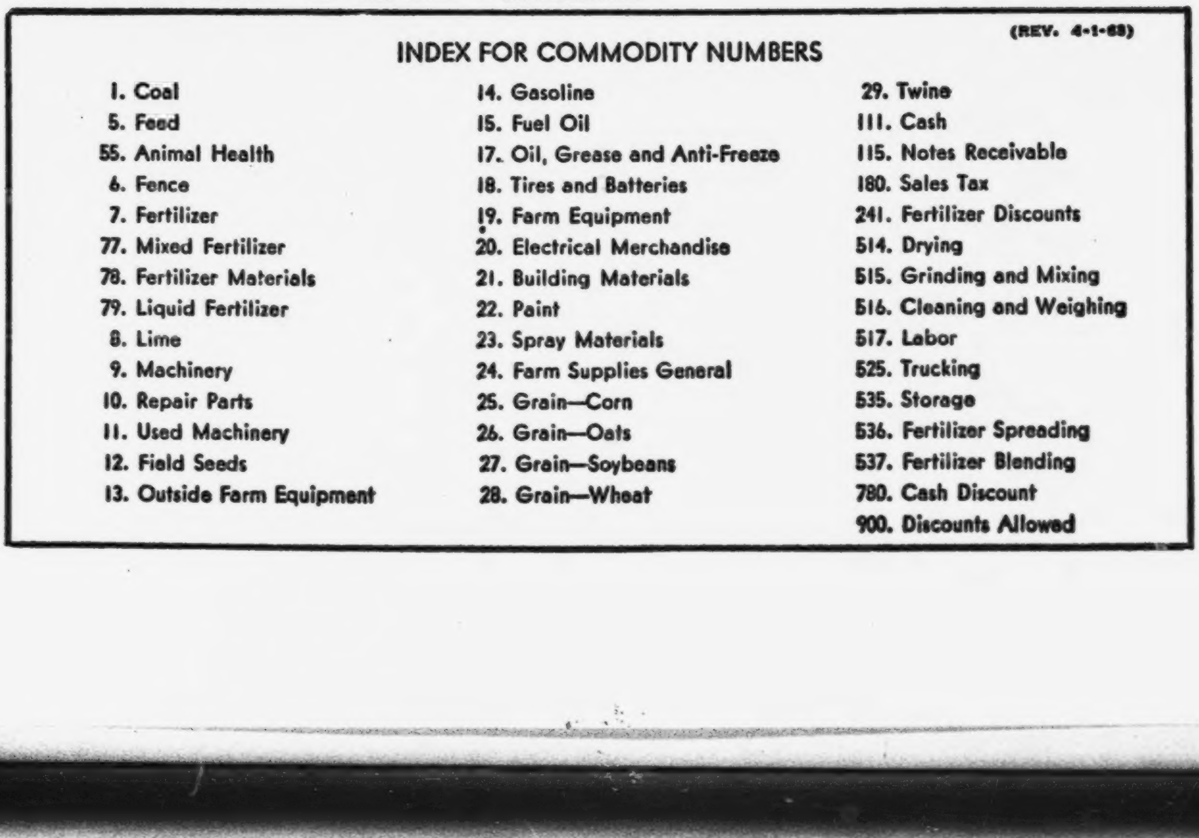
PLEASE RETURN THIS STUB WITH YOUR CHECK AMOUNT ENCLOSED $________

DATE	COMMODITY NO.	QUANTITY	CHARGES	CREDITS	BALANCE

PLEASE PAY LAST AMOUNT IN THIS COLUMN

REFER TO COMMODITY NUMBERS ON REVERSE SIDE.

Reverse Side of above Statement



(REV. 4-1-68)

INDEX FOR COMMODITY NUMBERS

1. Coal
5. Feed
55. Animal Health
6. Fence
7. Fertilizer
77. Mixed Fertilizer
78. Fertilizer Materials
79. Liquid Fertilizer
8. Lime
9. Machinery
10. Repair Parts
11. Used Machinery
12. Field Seeds
13. Outside Farm Equipment
14. Gasoline
15. Fuel Oil
17. Oil, Grease and Anti-Freeze
18. Tires and Batteries
19. Farm Equipment
20. Electrical Merchandise
21. Building Materials
22. Paint
23. Spray Materials
24. Farm Supplies General
25. Grain—Corn
26. Grain—Oats
27. Grain—Soybeans
28. Grain—Wheat
29. Twine
111. Cash
115. Notes Receivable
180. Sales Tax
241. Fertilizer Discounts
514. Drying
515. Grinding and Mixing
516. Cleaning and Weighing
517. Labor
525. Trucking
535. Storage
536. Fertilizer Spreading
537. Fertilizer Blending
780. Cash Discount
900. Discounts Allowed

C. Each of these items should be examined closely:

1. THE DATE WHEN THE STATEMENT IS MAILED. This date is usually the first month after which the business was done. For instance, this date would be December 1 for the purchases and payments that were made in November.

Sometimes companies use a different date than the end of the month to send out statements. This might be the 20th of the month to correspond with the date that farmers would normally get their milk check. In this case then, the date at the top of the statement would be the 20th of the month rather than the first,and the business recorded in the body of the statement (charges and credits on account) would be from the 20th of one month to the 20th of the next.

2. NAME AND ADDRESS OF THE CUSTOMER. It is important that these names and addresses be correct. An incorrect address can cause a needless delay in the statement reaching the customer. People do not like to have their names misspelled, and this is poor public relations.

3. PAY THE LAST AMOUNT IN THIS COLUMN. The customer need only look at this one figure on the statement to know what he owes. He may want to refer back to the charges and credits that made up this final figure, but the LAST FIGURE is what he owes.

This column is kept as a running balance column; charges are added to the balance ahead and any payments on account are subtracted from this figure.

4. STATEMENT OF SERVICE CHARGES. These statements are a record of charge accounts by the customer with the place of business. It must be remembered that charge accounts are the same as borrowing money from that company. They have put their money into these items of merchandise and then they have given the customer the merchandise until he pays for it.

Everyone who borrows money expects to pay interest on it. This is why there is an interest charge or service charge on these accounts. On these sample statements are two statements of the interest or carrying charges to be applied to the account.

One says: All past due accounts will be charged 1/2 to 1% carrying charge per month until paid.

The other says: When an account becomes delinquent interest will be charged at the rate of 6% per annum.

What is the difference in these two statements? Some examples will show this more clearly:

Assume that a balance of $240.48 is past due or delinquent. Each of the charges would be figured as follows:

$240.48		$240.48
.005	or	.01
$ 1.20240		$ 2.4048

This means that at 1/2% carrying charge, $1.20 would be added to the account that month. At 1% carrying charge, $2.40 would be added to the account that month.

This figuring actually can be easily done by inspection. To figure a 1% carrying charge on an account, all that needs to be done is to move the decimal point two places to the left. Then to get 1/2%, all that is required is to take 1/2 of the 1% figure.

$240.48 = $2.40 x 1/2 = $1.20

To figure 6% per annum requires a little more figuring. This is done as follows:

$240.48
.06
$14.4288 This would be the charge on this amount at 6% for a full year (per annum)

$14.42 ÷ 12 = $1.20 per month (This is the same figure as 1/2% per month.)

The usual charges are 6% or 1/2% per month. There is a maximum legal limit of 8% interest that can be charged if it is called interest. This is why these are often called service charges rather than interest if a company wants to charge more than the 6%.

The way this may work with some companies that use the 1/2 to 1% system is that they will charge the 1/2% on balances that are not paid up to six months and then the 1% on these accounts if they are not paid after six months or more. This is just another way to try to keep accounts current.

PAYABLE THE 20TH OF MONTH FOLLOWING PURCHASE. Some explanation of this statement needs to be made. This says that all purchases made during the month of August are due the 20th of September. After this date the dealer has the right to add his service charges. This is also the date after which accounts become DELINQUENT.

5. Column headings

   a. DATE: This date is the day of the purchase or credit on account. The date put on this statement form should correspond with the date on a sales slip. These dates should be in order during the month.

   b. ITEM, REFERENCE, OR COMMODITY: This column provides space for the description of the item purchased or to indicate a payment on account.

      Some statements are hand written and these are usually ruled. This type is shown in the first example, Figure 24. Other statements are made with a bookkeeping machine and the column for the commodity is rather limited. In this case the indication of the item that was purchased is shown by a number. This is well illustrated on the third example. Figure 26, where the commodity numbers are listed on the back of the statement form. The machine operators use these numbers to indicate on the face of the statement what the customer has purchased. These again should correspond with a sales slip.

   c. CHARGES: Figures are entered in this column for the total amount of the charges on a sales slip. Only the total figure from a sales ticket is entered here.

d. CREDITS: This column includes all items on the account that would reduce the balance that the customer owes. This would include:

1) Payments on account by: check, cash, grain applied on account.
2) Return of merchandise.
3) Credit by error: error in figuring, charge to the wrong account.

e. BALANCE: As was stated earlier, the last figure in this column is always the current amount that a customer owes the company. This is a running balance where charges are added each day and credits are subtracted. A company bookkeeper can go through the accounts file on any day of the month and by adding together all of these last figures in this column from each customer's account, can tell the total amount of the accounts receivable (what customers owe) on that partucular day.

6. BALANCE FORWARD: On every statement there needs to be a place to carry forward the balance from the previous month. These statement forms are taken from the files and sent to the customer at the end of each month, so a new one needs to be started for the coming month. This balance is obtained from the permanent file card that is a carbon copy of the statements that have been sent.

Figure 28 shows a sample copy of a permanent file card taken from the September purchases of John Wilson, page 59. This card stays in the files of the company as a permanent record. This is actually part of the bookkeeping system. It is a carbon of the statement that is sent to the customers. This means that the figures going to the customer are exactly the same as those going into the permanent file of the company.

Note that the Date, Item, Debit, Credit and Balance columns on this card are the same as the statement form on Figure 27. By using carbon paper the statement and the permanent file card can be made out at the same time.

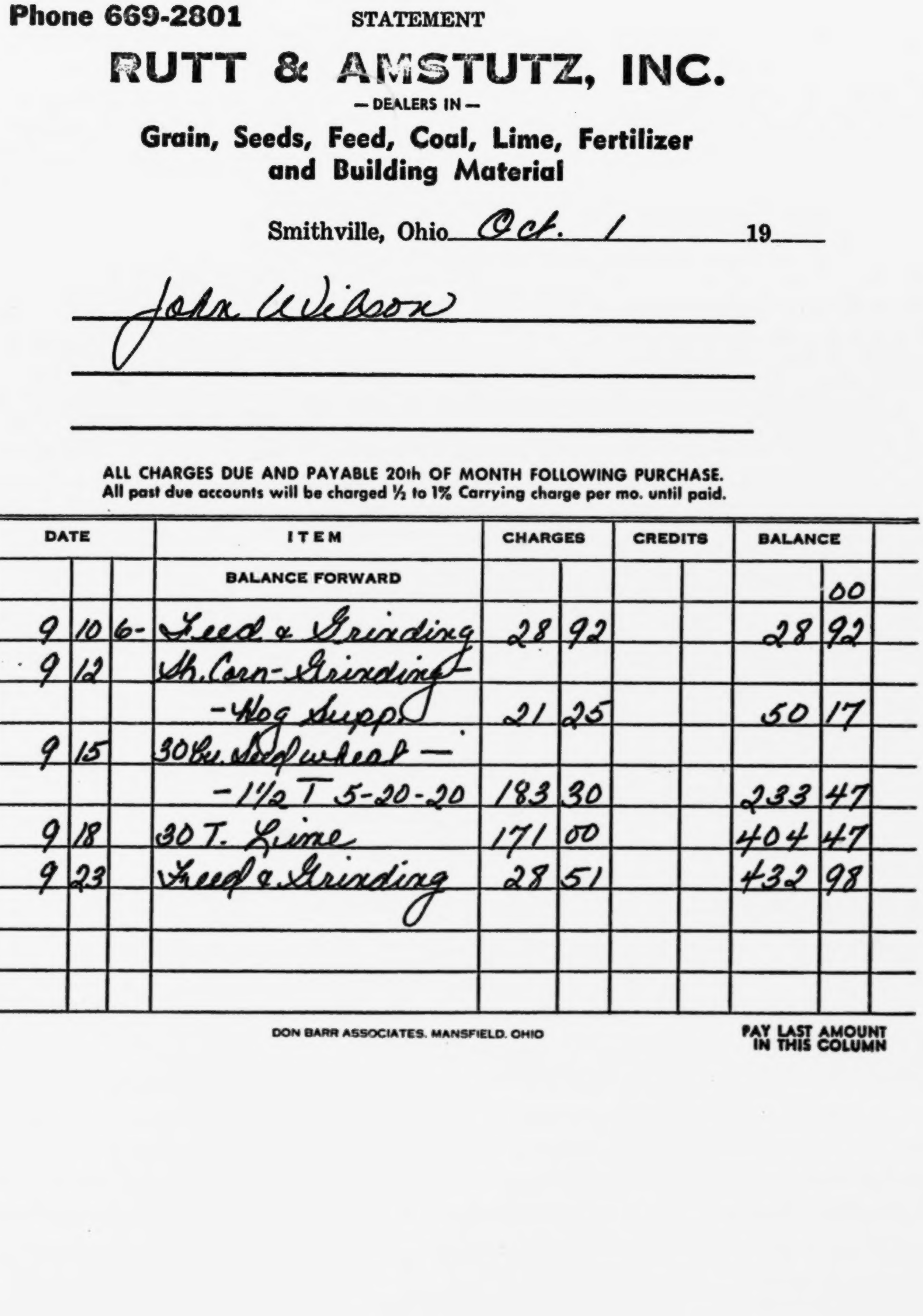
On the following pages are some problems to work out using the statement form and the permanent record card.

Problem 1. Prepare the monthly statement and permanent record forms for John Wilson's business transactions for the month of October which are shown on page 59.

Remove the statement form (Figure 29) from the book and position it over the permanent record form (Figure 28). The appropriate columns should line up. The line for the first item entry should be just below the last line of the September entry. Cut a piece of carbon paper to fit the statement form and insert between the two forms. Follow the examples given for September in Figures 27 and 28.

Remember, you need a balance forward figure at the top of the October statement. This will be the same figure that was the last figure on the September statement. The carbon should not be under this part of the statement. Keep the lines straight on the statement form and the permanent file card. The little ✓ mark in the last column should be made at the end of each posting so that you know which line you used last. It will not appear on the statement.

Figure 27. A Sample Statement for the Month of September.



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

— DEALERS IN —

Grain, Seeds, Feed, Coal, Lime, Fertilizer and Building Material

Smithville, Ohio Oct. 1 19

John Wilson

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

DATE			ITEM	CHARGES		CREDITS		BALANCE	
			BALANCE FORWARD						
									00
9	10	6-	Feed & Grinding	28	92			28	92
9	12		Sh. Corn-Grinding						
			-Hog Supp.	21	25			50	17
9	15		30 Bu. Seed wheat —						
			-1½ T 5-20-20	183	30			233	47
9	18		30 T. Lime	171	00			404	47
9	23		Feed & Grinding	28	51			432	98

FORM 2

DON BARR ASSOCIATES, MANSFIELD, OHIO

PAY LAST AMOUNT IN THIS COLUMN

Figure 28. A sample Permanent Record Card for the month of September.

SHEET NO.

NAME John Wilson

RATING

ADDRESS

TERMS

REMARKS	DATE			ITEM	DEBIT		CREDIT		BALANCE			
				BALANCE FORWARD						00		✓
	9	10	6-	Feed & Grinding	28	92			28	92		✓
	9	12		Sh. Corn - Grind - Hog Supp.	21	25			50	17		✓
	9	15		30 Bu. Seed Wheat - 1½T - 5-20-20	183	30			233	47		✓
	9	18		30 T Lime	171	00			404	47		✓
	9	23		Feed & Grinding	28	51			432	98		✓

Figure 28. (Cont.)

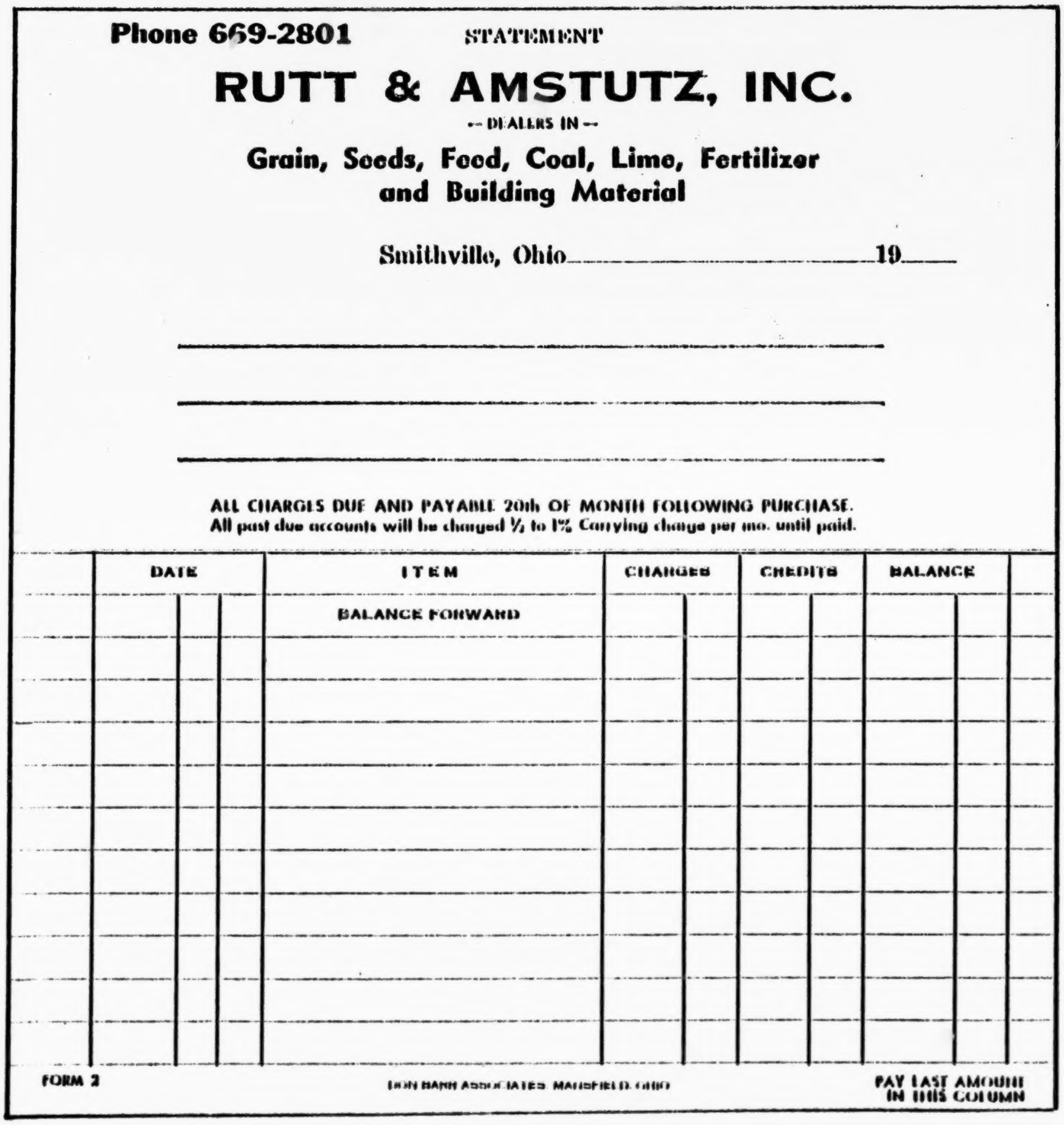
SHEET NO.__________

NAME __________ RATING __________

ADDRESS __________ TERMS __________

REMARKS	DATE	ITEM	DEBIT	CREDIT	BALANCE		
		BALANCE FORWARD					

Figure 29. Statement Form



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

-- DEALERS IN --

Grain, Seeds, Feed, Coal, Lime, Fertilizer
and Building Material

Smithville, Ohio____________________19____

____

____

____

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

	DATE	ITEM	CHARGES	CREDITS	BALANCE	
		BALANCE FORWARD				

FORM 2

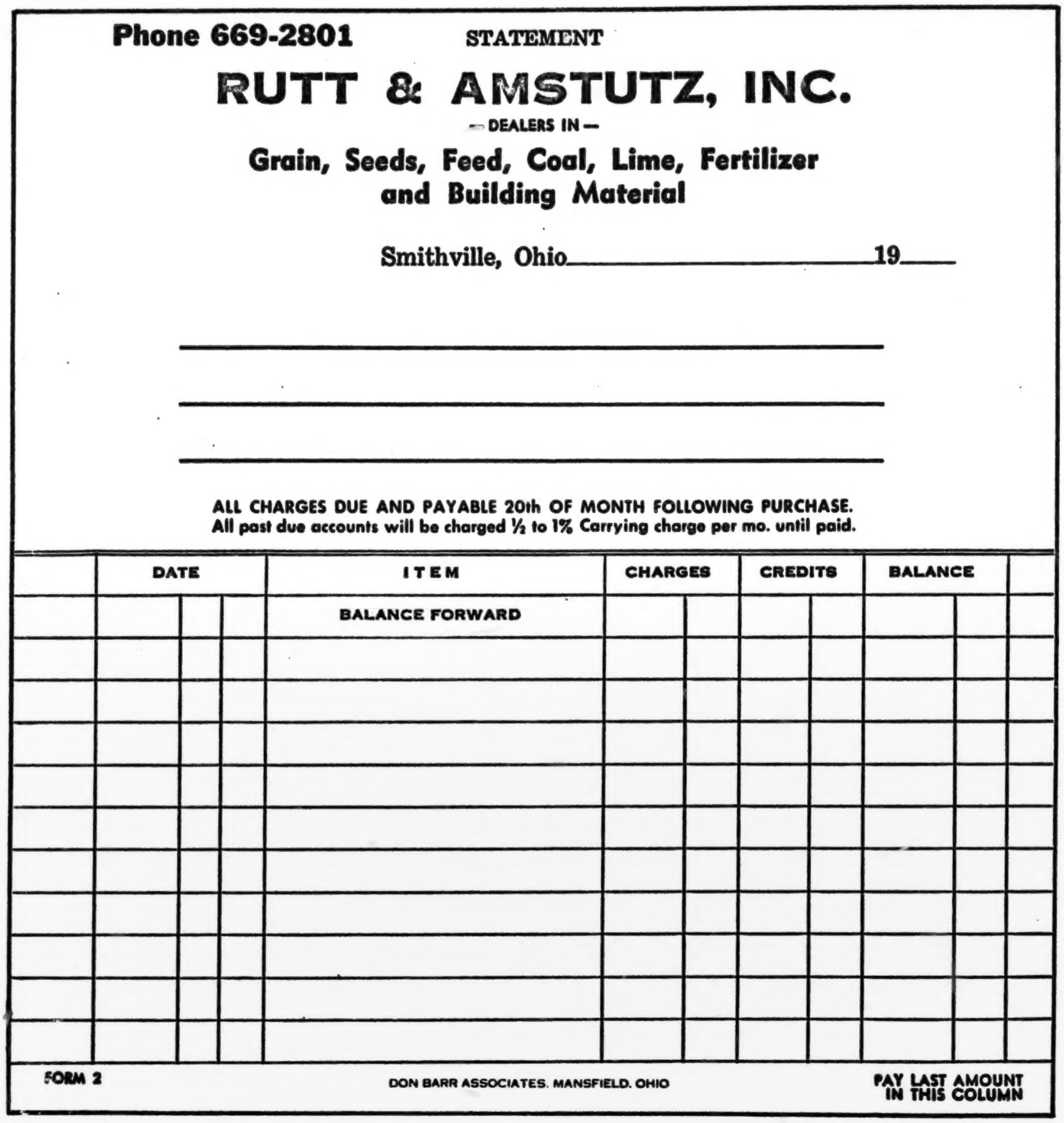
DON BAHN ASSOCIATES, MANSFIELD, OHIO

PAY LAST AMOUNT
IN THIS COLUMN

Problem 2. Prepare sales tickets for the business done by John Wilson in November, December, January and February. (See pages 83 and 84.) Use the price sheet from Chapter VI, page 59.

Using the blank statement forms (Figures 30 - 33) and a carbon sheet, make out statements and the permanent file card for the business of John Wilson for the four months of November, December, January and February. The statement forms may be removed from the book and positioned in the appropriate location over the permanent record form. Remember to carry forward the balance at the end of each month to the new statement form.

Figure 30. Statement Form



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

— DEALERS IN —

Grain, Seeds, Feed, Coal, Lime, Fertilizer
and Building Material

Smithville, Ohio______________________19____

____

____

____

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

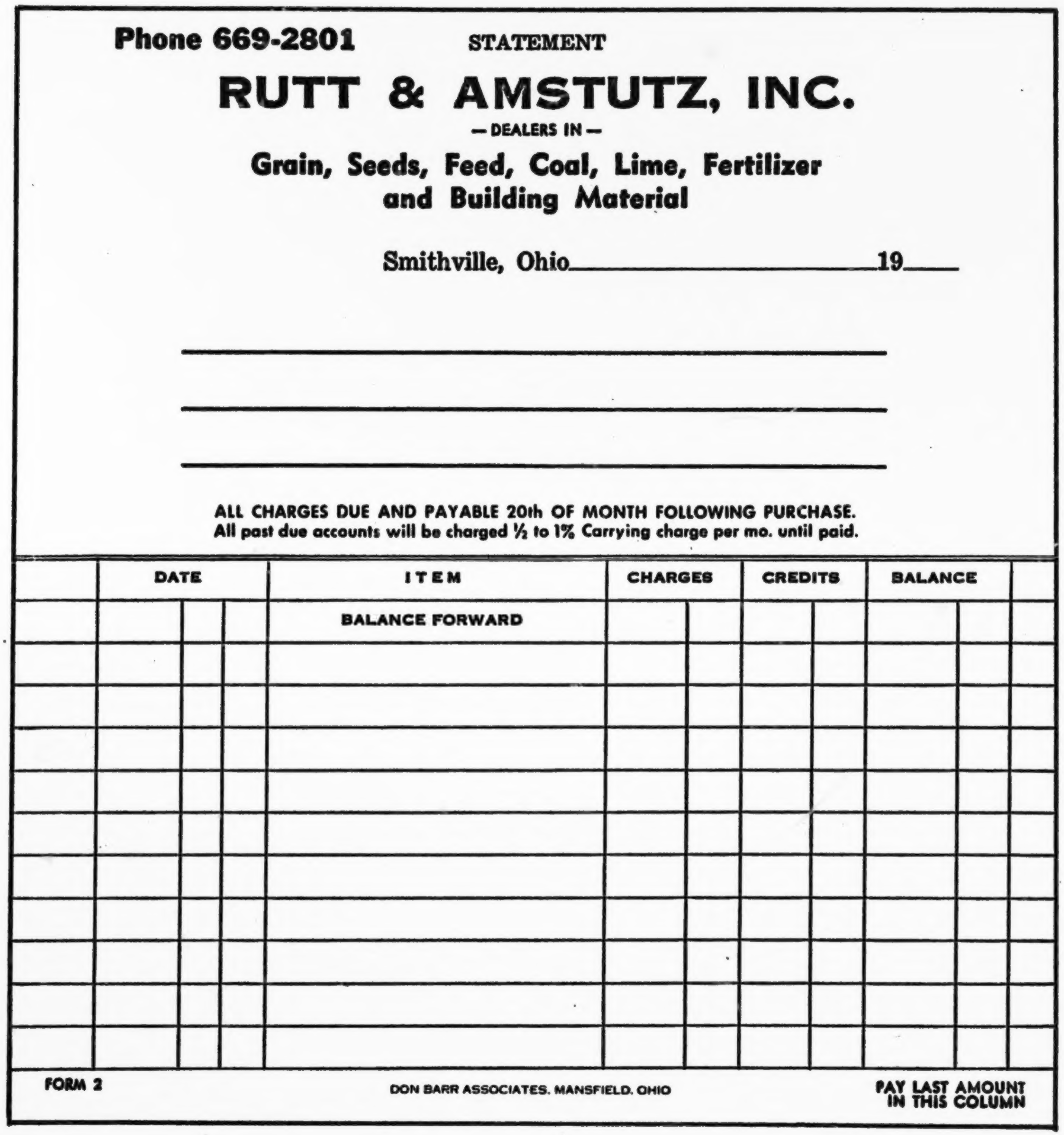
	DATE			ITEM	CHARGES		CREDITS		BALANCE		
				BALANCE FORWARD							

FORM 2

DON BARR ASSOCIATES, MANSFIELD, OHIO

PAY LAST AMOUNT
IN THIS COLUMN

Figure 31. Statement Form



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

— DEALERS IN —

Grain, Seeds, Feed, Coal, Lime, Fertilizer
and Building Material

Smithville, Ohio____________________19____

____

____

____

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

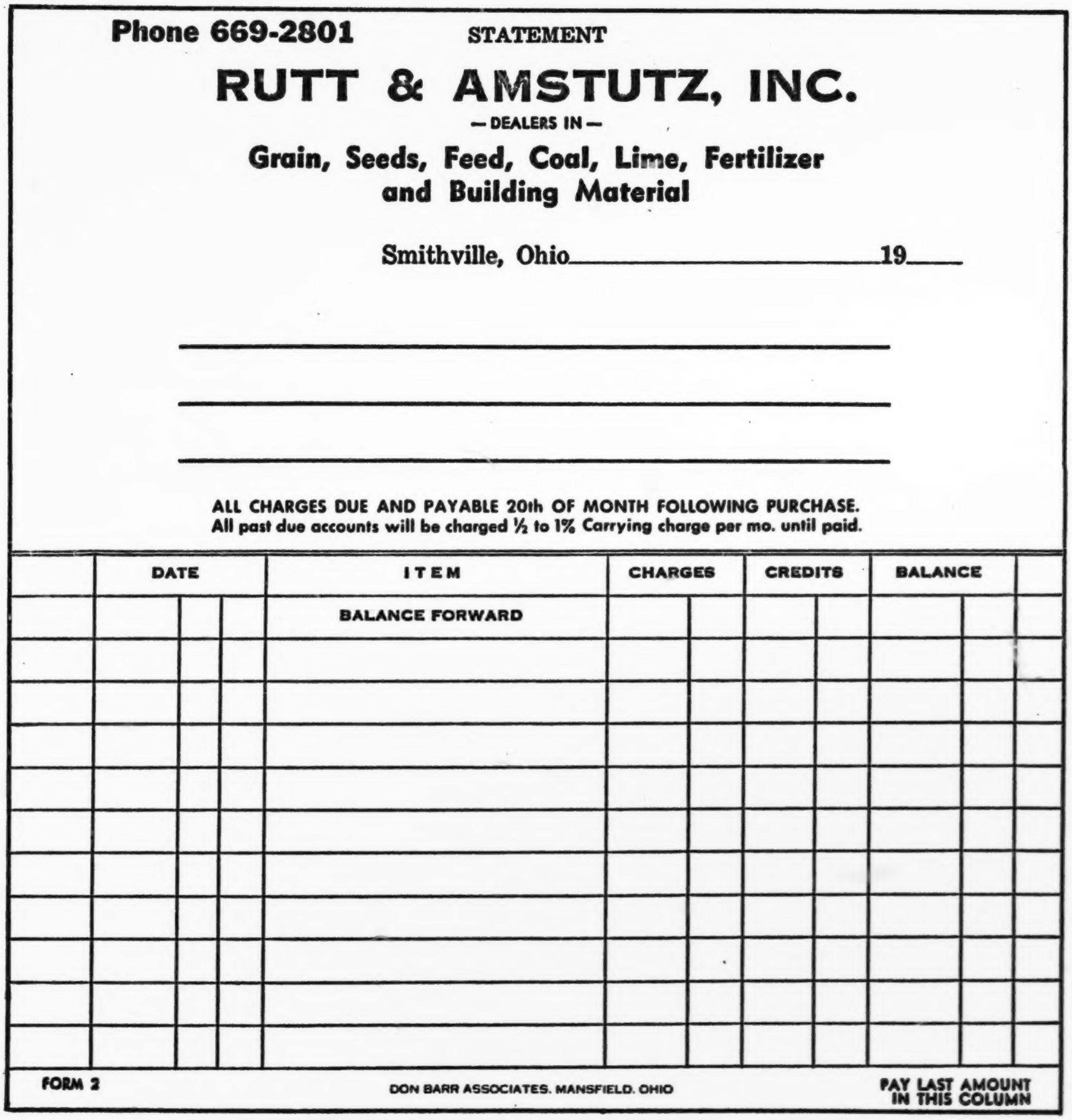
	DATE			ITEM	CHARGES		CREDITS		BALANCE		
				BALANCE FORWARD							

FORM 2

DON BARR ASSOCIATES. MANSFIELD. OHIO

PAY LAST AMOUNT
IN THIS COLUMN

Figure 32. Statement Form



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

— DEALERS IN —

Grain, Seeds, Feed, Coal, Lime, Fertilizer
and Building Material

Smithville, Ohio____________________19____

____

____

____

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

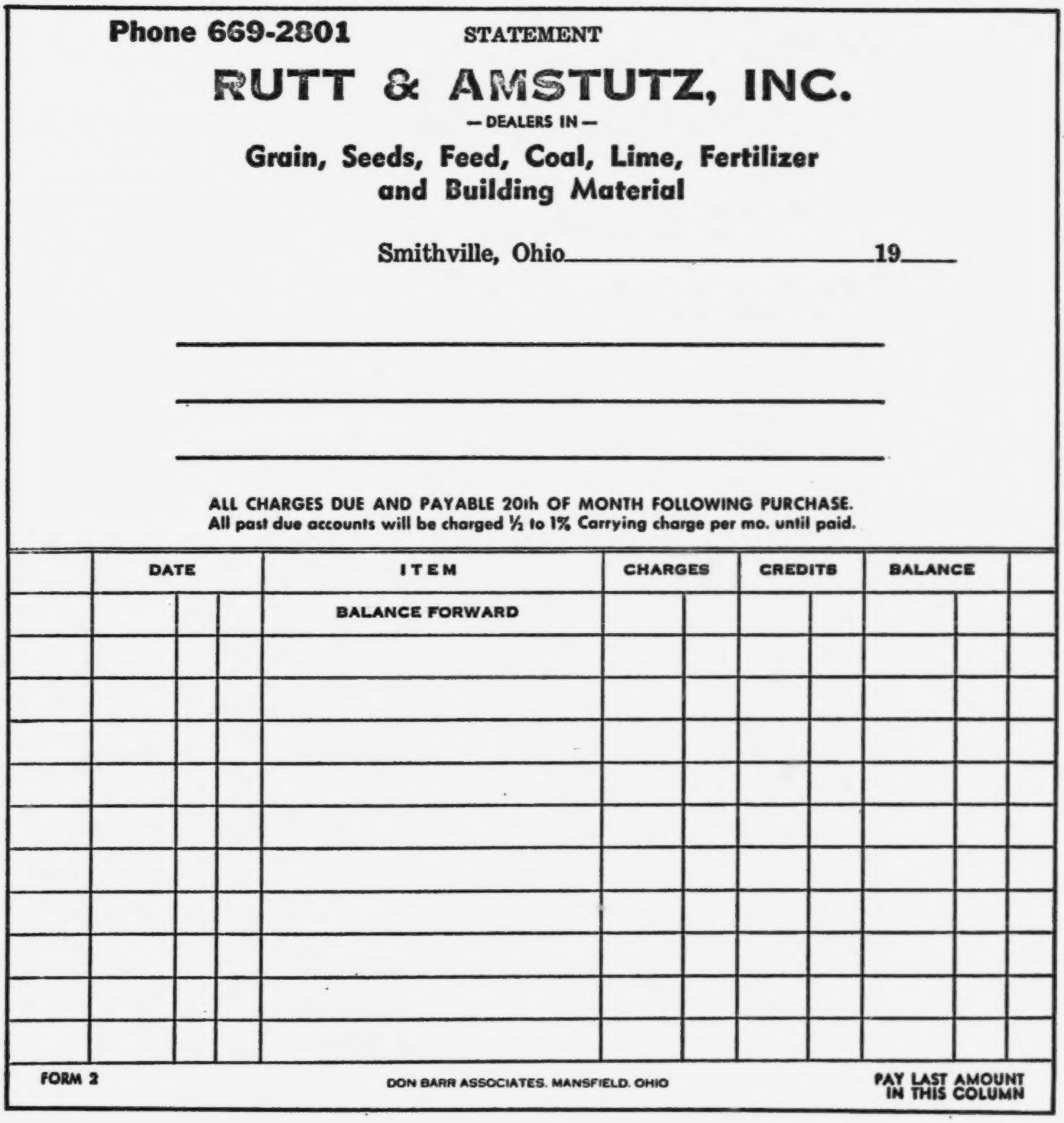
	DATE			ITEM	CHARGES		CREDITS		BALANCE		
				BALANCE FORWARD							

FORM 2

DON BARR ASSOCIATES. MANSFIELD. OHIO

PAY LAST AMOUNT
IN THIS COLUMN

Figure 33. Statement Form



Phone 669-2801 STATEMENT

RUTT & AMSTUTZ, INC.

— DEALERS IN —

Grain, Seeds, Feed, Coal, Lime, Fertilizer
and Building Material

Smithville, Ohio____________________19___

____

____

____

ALL CHARGES DUE AND PAYABLE 20th OF MONTH FOLLOWING PURCHASE.
All past due accounts will be charged ½ to 1% Carrying charge per mo. until paid.

	DATE			ITEM	CHARGES		CREDITS		BALANCE		
				BALANCE FORWARD							

FORM 2 DON BARR ASSOCIATES, MANSFIELD, OHIO PAY LAST AMOUNT IN THIS COLUMN

November purchases for John Wilson:

Nov. 4	4 gallons permanent anti-freeze (for tractors)
Nov. 8	800# shelled corn 800# grinding 150# hog supplement
Nov. 12	1540# grinding 300# oats 300# dairy supplement 40# mineral 20# salt 138# molasses
Nov. 18	50# calf starter
Nov. 22	Paid on account - $150
Nov. 26	1730# grinding 100# oats 300# dairy supplement 40# mineral 20# salt 116# molasses

December purchases for John Wilson:

Dec. 3	1000# shelled corn 1000# grinding 150# hog supplement
Dec. 10	1680# grinding 200# oats 300# dairy supplement 30# mineral 30# salt 122# molasses
Dec. 15	Four 50# bags agricultural lime.
Dec. 18	Ten 50# bags oyster shell
Dec. 22	Paid balance on account for end of year
Dec. 26	1650# grinding 200# oats 300# dairy supplement 40# mineral 20# salt 135# molasses

January purchases for John Wilson:

Jan. 4	1500# shelled corn 1500# grinding 175# hog supplement
Jan. 8	1590# grinding 300# bran 200# soybean meal 40# mineral 20# salt 118# molasses
Jan. 12	5 tons 5-20-20 fertilizer with January discount
Jan. 15	200# shelled corn 200# grinding 25# hog supplement
Jan. 21	Paid on account - $250
Jan. 25	1610# grinding 250# bran 200# soybean meal 30# mineral 30# salt 124# molasses

February purchases for John Wilson:

Feb. 2 1 1/2 bu. ranger alfalfa
1 bu. red clover
1/2 bu. alsike clover

Feb. 6 1820# grinding
200# bran
300# dairy supplement
40# mineral
20# salt
140# mineral

Feb. 10 20 bales baler twine

Feb. 15 8720# ear corn sold to be applied
applied on account at $1.70
per hundred

Feb. 22 Paid on account $250

Feb. 24 1680# grinding
300# bran
300# dairy supplement
40# mineral
20# salt
133# molasses

CHAPTER VIII: DAILY CASH BALANCE --- MONTHLY BANK BALANCE

Each day the business should check the amount of cash that is on hand in the cash drawer or cash register. There are a number of reasons why this is important:

1. This is a check on money that might be lost or misplaced.
2. This is a check on mistakes that might be made in making change or writing sales slips. (This is one reason for always writing the amount of a check given in payment on the sales ticket so that the figures for change can be checked.)
3. This is a check on money that might be taken from the cash drawer and not accounted for.

The formula for checking the cash balance is simple and the application is easy if all money is accounted for. The formula is:

Cash and checks on hand at the beginning of the day

plus

All cash and checks taken in during the day

minus

Any money taken out during the day (includes any cash paid out and any bank deposits made)

equals

New Cash Balance.

__Example__: $ 236.54 cash and checks on hand at the beginning of the day.

1658.88 cash and checks taken in during the day (for cash sales and payments on account).

4.50 cash paid out for freight charges.

1245.52 bank deposit

$ __645.40__ cash balance at the end of the day.

__Problem 1__. Add up the cash on hand from the following checks, bills and coins.

Checks:	Bills:	Coins:
$ 48.16	3 - $20	18 - 50¢
105.81	5 - $10	12 - 25¢
123.46	8 - $ 5	42 - 10¢
66.00	33 - $ 1	30 - 5¢
4.00		62 - 1¢
16.16		
81.80		
45.10		
100.25		

_____________ Total cash and checks on hand.

Problem 2. Using the cash balance from problem 1 as the cash balance for the beginning of the day, fugure the balance at the end of the day with the following transactions.

Cash balance at the beginning of the day ---------------------- __________

Cash slip $18.45

Charge slip $45.91

Cash slip $142.88

Cash slip $61.90

Paid on account $200.00

Charge slip $86.25

Cash slip $158.99

Cash slip $21.66

Cash slip $90.87

Paid on account $41.76

Cash paid out for gas $3.00

Cash slip $35.89

Cash slip $14.95

Cash slip $50.00

Cash slip $81.90

Paid on account $100.00

Charge slip $46.87

Bank deposit $1235.89

Cash slip $5.10

Cash slip $65.89

Cash balance at the end of the day ---------------------------- __________

This daily cash balance will be used with the one month problem in the back of the book.

A. Monthly bank balance

It is important that an accurate check record of expenditures be kept. There is no better way to keep account of expenses than to pay bills by check and then have the cancelled checks and the ckeck record on file. This is true for an individual as well as a business. This is an excellent record for income tax purposes.

B. Reasons for checking the business figures with the bank statement

Here again, this is like the daily cash balance in that it is a check on the money flowing in and out of the business. While the daily cash balance is taken for each day's business, the bank statement is usually only checked once a month. Some of the reasons for making this monthly check are:

1. The bank may make a mistake on your account. It does not happen very often, but it is possible. One of the most common mistakes at the bank is getting an item posted to an account because of a similar name. This might happen on an account where the business name of the company is similar to the owner's name. For example, John Smith might have a personal account at the bank and also operate The John Smith Company.

2. This is a check on the arithmetic in keeping the check record. Often the sales clerk might be busy at the time he has to write a check and in his haste, it is easy to make a mistake of $100, etc., in addition or subtraction in making the entry. Or in fact, it might be that a check has even been missed in entering in the check record. If the balance in the company book differs from that on the bank statement, the error should be found.

3. This also is a check on money that might be misplaced. A deposit that might be left in a coat pocket or a desk drawer after it has been entered in the business books might not get to the bank, and this would show up at the end of the month.

4. This might be the means of exposing a dishonest employee. An office clerk could write a check to himself and not enter it in the records of the business. But if this check appeared on the bank statement at the end of the month some checking would be done to find the reason for the difference in the balances.

Figure 34 shows an example of a bank statement. Note that all of the checks reaching the bank to be subtracted from the account are listed on this statement. These checks do not reach the bank in the order that they are written from the company because of time and distance and peoples' money habits. A check that has to go to a company in Chicago or New York will take longer to clear through the banks than one to a local farmer for a load of corn. Some people like to carry checks around with them for a time before cashing them feeling that this is safer than carrying money. You will notice on some checks that the statement is made that the check is void if not cashed in 30 or 60 days. This is put on there to try and hurry the checks through the banking system so that accounts can be kept current. Since these checks do not come to the bank in the same order that they are written at the company office, this sometimes creates a problem in matching the checks subtracted at the bank with the company records.

88. **THE FARMERS & MERCHANTS BANK CO.**
Smithville, Ohio

IN ACCOUNT WITH

PLEASE EXAMINE AT ONCE: IF NO ERROR IS
REPORTED IN TEN DAYS THE ACCOUNT WILL BE CONSIDERED CORRECT.

CHECKS		DEPOSITS	DATE		BALANCE
AMOUNT BROUGHT FORWARD			AUG. 31'65	17	561.91*
71.73 -			SEP. 2'65	1	490.91*
8.85 -			SEP. 3'65	2	481.33*
9.60 -			SEP. 4'65	3	471.73*
6.00 -	6.00 -				
100.00 -			SEP. 7'65	6	359.73*
15.33 -	45.88 -		SEP. 8'65	8	298.52*
5.00 -	7.00 -				
5.95 -			SEP. 9'65	11	280.57*
14.06 -			SEP. 14'65	12	266.51*
16.00 -			SEP. 20'65	13	250.51*
		418.00 +	SEP. 24'65	13	668.51*
2.00 -	10.00 -		SEP. 27'65	15	656.51*
.80 - SC			SEP. 28'65		655.71*
50.00 -	13.45 -		SEP. 28'65	17	592.26*
63.00 -			SEP. 30'65	18	529.26*

FRED PROCTER CO., CINTI. 80189-N

KEY

TX—TAX	CM—CREDIT MEMO
SC—SERVICE CHARGES	LST—TOTAL OF SEVERAL CHECKS
EC—ERROR CORRECTED	RET—RETURNED ITEM
CC—CERTIFIED CHECK	OD—OVERDRAFT
DM—DEBIT MEMO	

LAST AMOUNT IN THIS
COLUMN IS YOUR BALANCE

Note also that there is a place for listing all of the deposits to the bank account during the month. This is usually easier to check because they are usually made in fairly large amounts and usually not more than one deposit per day, and these are generally posted at the bank the same day or the day after they are entered in the business record. So these are usually in order and easy to follow.

Notice that the balance is kept as a running daily total. In this way the bank knows each day just what the balance is on any account. This might not be done each day at the business office. In fact it might be done only once a month when the account is checked with the bank statement.

Notice at the bottom of the statement there are a number of items that the bank may subtract from your account that you have not written a check for. They just deduct this amount from your balance in payment for the service that they have given you. If these items are not deducted once a month from the check record at the business office, the check record will not be accurate.

REMEMBER THE MONTHLY STATEMENTS THAT YOU MADE IN THE PRECEEDING CHAPTER?

These were statements of the business that a farmer did with the company during any particular month. This bank statement is the same kind of a record of the money business that the company did with the bank during this month. Banks deal in money and get paid for offering this service.

FORMULA: There is a formula for checking the monthly bank balance just as there is a formula for checking the daily cash balance (page 85). This formula is:

> Start with the last balance figure on the bank statement.
>
> Add back to this any service items that have been deducted. (This is because these have not yet been deducted from the books at the place of business.)
>
> Subtract the amount of checks that have been written at the place of business but have not yet come to the bank. (These are usually checks that have been written at the very end of the month or a check that someone is holding.)
>
> This should give the balance that is in the company check record.

If these do not balance, each item of deposit or check written will have to be checked.

The following two problems deal with figuring bank balances:

Problem 1.

Add all the checks written.

Subtract this from the balance at the beginning of the month.

Add all the deposits made.

Add this to the total after checks were subtracted and this will be the new bank balance.

This could be done each week, or each month or at any time that the manager would like to know what the bank balance actually is.

Bank balance at the beginning ------------------------------ $32,561.89

Checks written	Deposits made
$453.80	
62.21	$ 980.50
58.19	
64.52	
88.76	
689.00	
553.87	1567.90
78.90	
123.60	
59.62	
84.45	520.80
66.21	
189.56	
345.81	
622.58	1018.54
54.19	

Bank balance at the end of these transactions--------------- $____________

The example above might be the way that the check and deposit record is kept at the company. A daily balance is not kept and the balance may only be figured once a month or once a week. This is a record of all transactions and not a daily running balance. At the bank they keep a running daily balance of all accounts, and a balance figure is carried at the end of each day's entries.

Problem 2. Figure a balance each day.

Add the checks cancelled that day.

Subtract this total from the balance at the beginning.

Add any deposits made for that day.

Enter this as a daily balance.

Start with this balance for the next day.

This is the way the bank carries each account balance, so they can tell at a glance how much is in any account at a particular time.

Figure a daily balance figure in this problem.

Bank balance at the beginning---------------------------- $15,890.80

	Checks cancelled	Deposits made	
Oct. 1	$ 546.78		
	66.81	$ 980.56	
	48.90		________
Oct. 2	780.45		
	1655.60		
	445.90		
	63.18		________
Oct. 3	681.54		
	236.90	2384.16	
	515.89		________
Oct. 4	161.56		
	16.21	885.80	
	45.18		________
Oct. 5	90.95		
	66.80		
	145.55		
	518.90		________

In problem 3 these two systems are compared to each other to see if the records are being kept accurately both at the bank and at the office of the company.

In this problem the final balance should be the same on both sides.

With the company books: Add up all the checks written.

Subtract this from the beginning balance.

Add the total of deposits to this.

Subtract the bank service charge.

With the bank record: Figure a daily balance by subtracting checks cancelled and adding deposits made.

Subtract the bank service charge.

Subtract the total of outstanding checks. This is any check that has been written by the company and subtracted from their balance but has not been received by the bank to be subtracted from their balance.

Problem 3. In problems 1 and 2 the business records and the bank records were kept separated. In the following example the two systems are put together into one problem. The company books must balance with the bank records. Anything in the way of service charges deducted at the bank needs to be deducted from the company balance at the end of the month and any OUTSTANDING checks (checks written at the company but not received at the bank) need to be deducted from the bank's balance before the two balances are equal.

Company Books

Beginning balance ---------- $24,681.50

Checks		Deposits
Oct. 1	518.54	
	16.81	
	458.95	
Oct. 3	48.16	
	55.10	861.90
	125.18	
Oct. 5	88.21	
	64.25	
	681.90	
	5.10	
Oct. 7	1052.74	
	41.90	2469.51
	16.22	
	25.94	
Oct. 9	155.90	
	81.56	
	42.90	
	16.22	
Oct. 15	122.85	
	75.00	980.90
	23.50	
Oct. 30	18.79	
	67.80	
	168.34	1350.00

Balance at end of month: ______

Less bank service charge: ______

Final balance ------------ ______

Bank Record

Beginning balance ----------- $24,681.50

Checks received		Deposits	Balance
Oct. 1	16.81		______
	518.54		
Oct. 3	458.95	861.90	______
	55.10		
Oct. 5	64.25		______
	5.10		
Oct. 7	681.90	2469.51	______
	41.90		
	25.94		
Oct. 8	1052.74		______
	42.90		
	16.22		
Oct. 15	75.00	980.90	______
	23.50		
Oct. 16	Bank service charge $2.85		______
Oct. 30	122.85	1350.00	______
	48.16		

Balance at end of month: ______

Less outstanding checks:

______

______

______

______

______

______

______

______

______

Final Balance ------------- ______

Sometimes there is a mistake in figures between the company books and the figures at the bank. Some of the more common mistakes are:

1. Figures may be transposed (writing 84 instead of 48)
2. An entry may be made twice
3. One figure might be dropped from a number
4. A figure might be off by $10 or $100
5. A figure might be added when it should have been subtracted.

Following are two problems to be worked where the figures at the company office are different than those at the bank. Assume that the figures at the bank are the correct ones, except in the case of duplicate figures.

When the bank balances on the company books and the bank statement are the same there is no problem, but if the two figures are not the same then a mistake needs to be found. In the following two examples there is a mistake between the two balances. Find the mistake:

Problem 4.

Company Books

Beginning balance ---------- $18,560.55

Checks written	Deposits
561.89	
67.90	495.00
51.10	
618.56	
114.20	689.00
42.80	
66.90	
345.00	
95.80	385.68

Final balance --------------- ________

Bank Statement

Beginning balance ---------- $18,560.55

Checks cancelled	Deposits	Balance
51.10	495.00	________
561.89	689.00	________
618.65		
42.80	385.68	________
66.90		
345.00		
42.80		

End of month balance -------- ________

Less outstanding checks:

____
____
________ ________

Final balance --------------- ________

Problem 5.

Company Books

Beginning balance ------------ $9, 568.45

Checks written	Deposits
66.81	
55.10	418.50
168.00	
567.89	
356.56	444.80
128.90	
16.88	
94.67	688.40
345.70	

Final balance -------------- ________

Bank Statement

Beginning balance ----------$9, 568.45

Checks cancelled	Deposits	Balance
168.00	418.50	________
66.81		
365.56	444.80	________
567.89		
128.90		
16.88	888.40	________
94.67		
345.70		________

End of month balance-------- ________

Less outstanding checks:

________ ________

Final Balance -------------- ________

All of the money that goes from the business to the bank needs to be recorded on a bank deposit slip. (Figure 35.)

This slip should be made in duplicate with one copy going to the bank with the money and the other copy staying at the company office for checking of records. On the following page is a sample bank deposit slip.

There is a place for:

1. the name of the company or person making the the deposit.
2. the date (this is important in checking back).
3. the total in bills (currency).
4. the total silver (coins).
5. each individual check (the space at the left is to identify each check if this is desired).
6. the total.

Transfer the figures to the deposit slip.

Transfer the following checks and money to the bank deposit slip:

Quantity		Amount
10	-----	$ 20
12	-----	10
16	-----	5

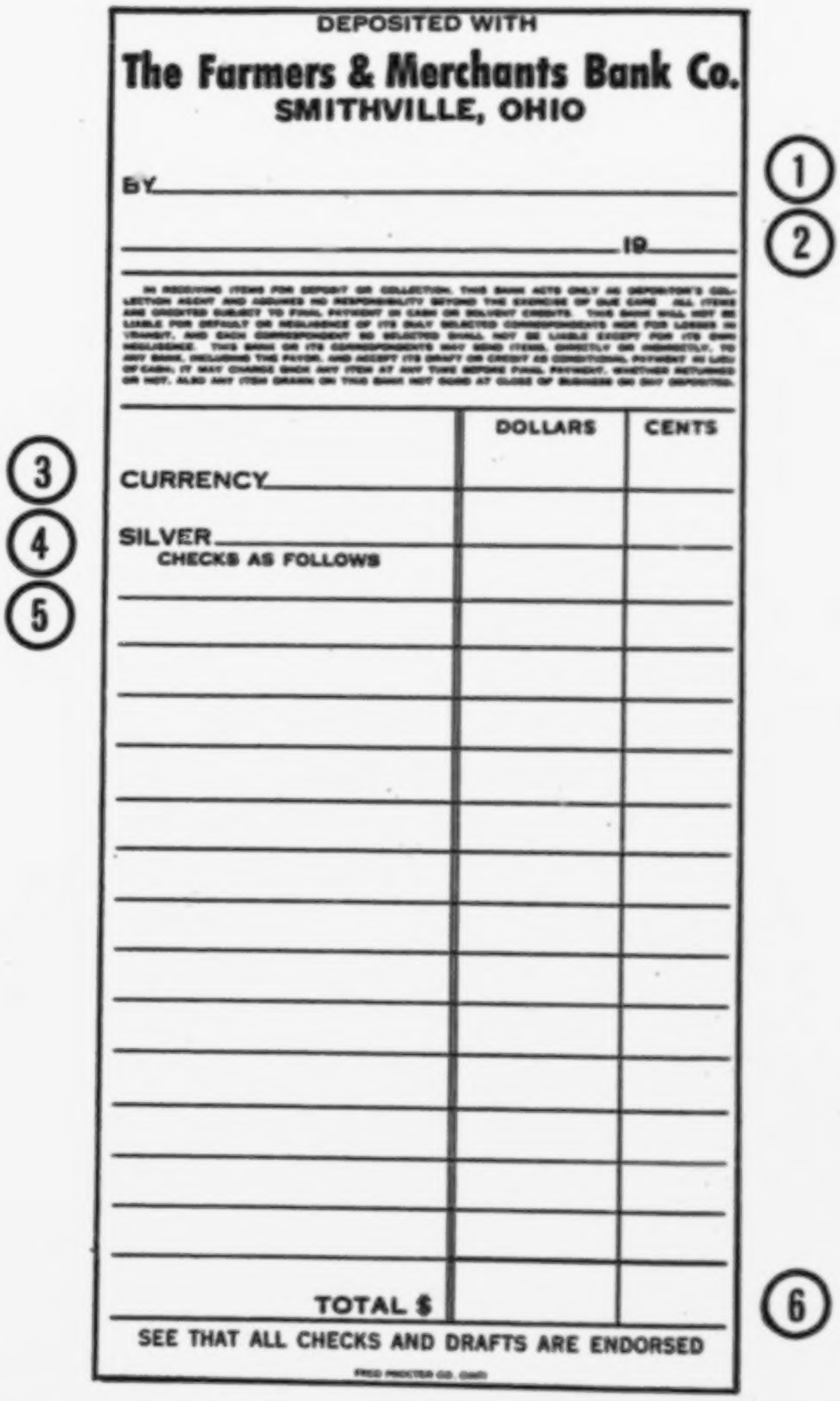
Checks: $ 345.89
46.78
116.45
1.52
681.90
52.18
66.01
418.60
22.10
9.90
57.35
91.88
12.16
35.66

Silver:

22 ---- 50¢

35 ---- 10¢

Figure 35: Bank Deposit Slip



DEPOSITED WITH

The Farmers & Merchants Bank Co.

SMITHVILLE, OHIO

BY ______________________

______________________ 19 ______

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

CHAPTER IX: PURCHASING AND STORING GRAIN

One of the major operations of many local elevator points is the handling of grain for the farmers of the community. This may be the purchasing, drying, storage or grain banking of the farmer's product. In fact, with some elevators this may be the major business.

There are a number of topics that need to be discussed and studied in relation to the grain handling from the farmer to the terminal elevator. These may be listed as follows:

A. Terms used by the grain trade
B. Discount schedules
C. Shrinkage in drying
D. Scale tickets and settlement checks
E. Warehouse receipts
F. Storage charges

A. Write a definition for the following terms. Get information on these terms through class discussion, references, field trips or a speaker into a class session.

1. Carload lot:____

2. F.O.B.:____

3. Freight charges:____

4. Test weight:____

5. Grain bank:____

6. Shrinkage:____

7. **Foreign material:** ______________________________

8. **Damaged grain:** ______________________________

9. **Food and Drug Administration:** ______________________________

10. **Mercury compounds:** ______________________________

11. **Future markets:** ______________________________

12. **Dockage:** ______________________________

13. **Terminal market:** ______________________________

14. **Milling in transit:** ______________________________

15. **December wheat:** ______________________________

16. **Warehouse receipt:** ______________________________

17. **Bill of lading:** ______________________________

18. Gross weight:

19. Tare weight:

20. Net weight:

21. Moisture tester:

22. Grain sample:

23. Federal inspector:

24. Discount:

25. Shell out:

Anyone having connection with the handling of grain will encounter some of these terms. Keep these in mind as the work is done in the rest of the chapter.

Farmers selling their grain to country elevators are often confused and irritated by the discounts applied to their grain. This is caused by a poor understanding of the system used and why discounts are necessary. People working in the grain buying trade should be able to explain the reasons for discounts to their customers. A better understanding of the reasons for discounts will improve customer relations.

Discounts applied: Discounts are applied on grains for conditions that make a particular lot of grain inferior to first class material that the grain merchant can buy. These may be conditions of moisture, test weight, foreign material, heat damage, insect infestation or loss of condition through storage.

B. Discount schedules:

On the following pages are discount schedules for corn, wheat and soybeans. It will be noted on each discount schedule that there is a deduction for the conditions mentioned above.

A bulletin that should be studied along with this chapter on handling grain is Bulletin 425 of the Agricultural Extension Service, The Ohio State University, by Ross Milner, Extension Economist in Grain Marketing. Several parts of this bulletin are being used in this chapter.

In the discount schedules that follow it will be noted that a large part of the discount is for moisture in the grain. It is understandable that grain quotations came to be stated in percentage of moisture content because the value of grains is dependent upon the amount of dry matter they contain. High moisture causes grain to be worth less for several reasons:

1. Such grain contains less dry matter.
2. This grain creates a storage problem.
3. Moisture promotes insect and disease growth.
4. Excess moisture makes processing difficult.
5. This may lower other related grade factors (high moisture reduces test weight).
6. Increases transportation costs.
7. Creates a drying cost.

When high moisture grain is handled and shrunk to a dry basis, there are two types of losses in weight that occur:

1. Moisture loss
2. Dry matter loss

Farmers are used to the moisture loss and have witnessed this in their own cribs at home. The level of corn in the crib shrinks during the winter as the corn is drying out. The dry matter loss comes from handling and is unavoidable. These losses come from:

1. Removal of chaff
2. Bee's wings (corn)
3. Parts of tip caps
4. Fine parts of cracked kernels
5. Dust caused by rubbing and polishing.

These dry matter losses amount to about one-half of one per cent which is not a large amount but adds up when a large volume of grain is being handled.

These factors of shrink have been put together in a chart in Dr. Milner's bulletin. This chart is reproduced below, and a few problems worked from the chart will help in the understanding of this shrink. The percentage shrink in this chart includes both the moisture loss and the dry matter loss.

Figure 36. Grain Shrinkage Chart

Percentage Shrinkage When a Unit of Grain is Dried to Selected Percentages of Moisture[1]

Percentage Moisture In Grain	Percentage of Shrinkage When Grain Is Dried to:					
	13.0% Col. 1	13.5% Col. 2	14.0% Col. 3	14.5% Col. 4	15.0% Col. 5	15.5% Col. 6
13.0	0	0	0	0	0	0
13.5	1.07	0	0	0	0	0
14.0	1.65	1.08	0	0	0	0
14.5	2.22	1.66	1.08	0	0	0
15.0	2.80	2.23	1.66	1.09	0	0
15.5	3.37	2.81	2.24	1.67	1.09	0
16.0	3.95	3.39	2.83	2.25	1.68	1.09
16.5	4.52	3.97	3.41	2.84	2.26	1.68
17.0	5.10	4.55	3.99	3.42	2.85	2.28
17.5	5.67	5.12	4.57	4.01	3.44	2.87
18.0	6.25	5.70	5.15	4.59	4.03	3.46
18.5	6.82	6.28	5.73	5.18	4.62	4.05
19.0	7.40	6.86	6.31	5.76	5.21	4.64
19.5	7.97	7.44	6.90	6.35	5.79	5.23
20.0	8.55	8.01	7.48	6.93	6.38	5.83
20.5	9.12	8.59	8.06	7.52	6.97	6.42
21.0	9.70	9.17	8.64	8.10	7.56	7.01
21.5	10.27	9.75	9.22	8.69	8.15	7.60
22.0	10.84	10.33	9.80	9.27	8.74	8.19
22.5	11.42	10.90	10.38	9.86	9.32	8.78
23.0	11.99	11.48	10.97	10.44	9.91	9.38
23.5	12.57	12.06	11.55	11.03	10.50	9.97
24.0	13.14	12.64	12.13	11.61	11.09	10.56
24.5	13.72	13.22	12.71	12.20	11.68	11.15
25.0	14.29	13.79	13.29	12.78	12.26	11.74
25.5	14.87	14.37	13.87	13.37	12.85	12.33
26.0	15.44	14.95	14.45	13.95	13.44	12.93
26.5	16.02	15.53	15.03	14.54	14.03	13.52
27.0	16.59	16.11	15.62	15.12	14.62	14.11
27.5	17.17	16.68	16.20	15.70	15.21	14.70
28.0	17.74	17.26	16.78	16.29	15.79	15.29
28.5	18.32	17.84	17.36	16.87	16.38	15.88
29.0	18.89	18.42	17.94	17.46	16.97	16.48
29.5	19.47	19.00	18.52	18.04	17.56	17.07
30.0	20.04	19.58	19.10	18.63	18.15	17.66
30.5	20.61	20.15	19.69	19.21	18.74	18.25

---

[1] All of the above percentages of shrinkage figures include actual moisture loss plus one-half percent for dry matter loss.

The percentage of shrinkage may be applied to pounds, bushels, tons and all other units of quantity.

Figure the shrinkage in these problems using the chart on page 101.

Sample: How many pounds will be lost when a load of wheat that weighs 12,860# is dried from 18.0% to 14.0%?

12,860 lbs. grain x .0515 (factor from table) = 662.29 lbs. shrink

This is the reason some discount needs to be taken for high moisture.

1. What is the weight loss when a load of shelled corn that weighs 9844# is dried from 25.0% to 15.0%? __________#

2. What is the weight loss when a load of oats that weighs 12,500# is dried from 17.0% to 13.0#? __________#

3. How much weight is lost when a load of wheat that weighs 14,220# is dried from 16.0% to 13.5%? __________#

This table can be applied to other units besides pounds, such as bushels and tons.

4. How many bushels of corn are lost when a load of corn that contains 242 bu. of tough corn is dried from 26.0% to 15.0%? __________bu.

5. How many tons of shelled corn are lost when a semi-load of corn that contains 16 tons of tough corn is dried from 24.0% to 15.5%? __________Tons

On the regular grain discount sheets these percentages of shrink have been converted to cents of discount.

In addition to the moisture (or shrinkage) discount, other factors that make the grain of inferior quality cause discounts to be applied. Some of these are explained below.and then note them in the discount sample sheets on the following pages.

The sample discount schedules are used by permission of Landmark. They are for the purposes of this exercise, and the discounts may not be current.

Moisture discount: In the grain trade and through government standards, moisture levels are established above which discounts are applied. For the various grains these are as follows:

corn - 15.5%
wheat - 13.5%
soybeans - 13.0%

Discounts are applied for moisture in grain for two reasons:

1. The merchant is purchasing water which is of no value to him. When the grain is dried there will be weight loss.
2. The grain must be dried which takes labor and equipment.

These two factors are taken into account in arriving at the moisture discount.

Test weight discount: Again by government standards, official weights per bushel are established. These test weights are for high quality grain. If a bushel measure of the grain does not come up to this weight, it means that some condition in the product is making it inferior. This means that the miller or processor will not get as much yield from the bushel of grain as he would from high quality material. The weights below which grains are to be discounted are as follows:

Grain	Official Weights	Minimum Test Weight
wheat	60# per bu.	58# per bu.
corn	56# per bu.	54# per bu.
soybeans	60# per bu.	54# per bu.

Foreign material discount: Foreign material may be anything that does not belong in this sample of grain. This might be other grains (such as rye in wheat or corn in soybeans) or weed seeds, or sticks or stones. The dealer is not interested in buying this material if he is buying it for a specific grain and all of these materials add weight to the load.

Shrunken and broken kernels: A damaged kernel does not have the feed quality or milling qualities of sound grain. For high quality products these materials have to be screened out which requires an extra cleaning and a loss in weight.

Musty-heating-sour-insects: All of these conditions reduce the quality of the grain. In fact, these conditions often require that the grain be used for livestock feed which brings a lower price than the regular milling trades.

Smutty or garlicky wheat: The only way that these materials can be taken from grains is by a washing process. This again takes labor and equipment.

THESE ARE THE REASONS THAT THE FARMERS' GRAIN IS DISCOUNTED. IF HE UNDERSTANDS THESE REASONS, HE WILL BETTER UNDERSTAND THE DISCOUNT ON HIS GRAIN.

Figure 37: Corn Discount Schedule

Supersedes all previous rail discount schedules, and becomes effective with contracts written October 16 and thereafter.

Applicable to ears unloaded at Columbus, Sidney or Lima
Minimum Discounts for Corn Grading Below 2#
Subject to Change Without Notice.

Discounts for Moisture

15.6 to 16.0	1 1/2¢	20.1 to 20.5	12¢
16.1 to 16.5	3 ¢	20.6 to 21.0	13¢
16.6 to 17.0	4 1/2¢	21.1 to 21.5	14¢
17.1 to 17.5	6 ¢	21.6 to 22.0	15¢
17.6 to 18.0	7 ¢	22.1 to 22.5	16¢
18.1 to 18.5	8 ¢	22.6 to 23.0	17¢
18.6 to 19.0	9 ¢	23.1 to 23.5	18¢
19.1 to 19.5	10 ¢	23.6 to 24.0	19¢
19.6 to 20.0	11 ¢	24.1 to 24.5	20¢
		24.6 to 25.0	21¢

1% discount each 1/2% moisture beyond 25.0

Discounts other than for moisture

Test weight	1¢ each 1# or fraction under 54#
Musty	3¢
Heating	5¢
Sour	6¢
Hot	6¢
Weevily	3¢ discount
Foreign material	1¢ each 1% or fraction over 3.0
Damaged grain	1¢ each 1% or fraction over 5.0
Heat damage	1/2¢ each 1/10% over 2/10% to 3% plus 1¢ over 1/10% over 3%

From the corn discount schedule (Figure 37) figure the discount per bushel from the following tests:

1. 55# test weight -- 21.3% moisture ____________________
2. 53# " " -- 23.8% " ____________________
3. 56# " " -- 26.9% " ____________________
4. 55# " " -- 19.2% " ____________________
5. 52# " " -- 33.2% " ____________________
6. 55# " " -- 22.8% " -- 7% damaged grain ____________________
7. 52# " " -- 24.1% " 3.5% foreign material ____________________
8. 56# " " 15.2% " ____________________
9. 55# " " 35.0% " heating ____________________
10. 54# " " 21.2% " ____________________
11. 55# " " 15.3% " 3.4% heat damage ____________________
12. 51# " " 19.8% " musty ____________________

With dry shelled corn being worth $1.12 per bushel, what is the value of the following loads of corn?

1. 164 bushels
   55# test weight
   24.6% moisture ____________________
2. 84 bushels
   52# test weight
   22.8% moisture ____________________
3. 190.8 bushels
   56# test weight
   23.4% moisture ____________________
4. 68.5 bushels
   53# test weight
   18.7 moisture ____________________
5. 786.54 bushels
   55# test weight
   15.2% moisture ____________________

C. Sometimes a customer is interested in only a drying service for corn that he wants to put in the grain bank or in storage. In this case it is necessary to figure a shrinkage to determine how much dry corn comes from his load and then figure the charges for this drying service.

Figure 38 shows a chart that gives this shrinkage in percentage and then a charge per bushel in cents for this level of moisture.

Here is a sample problem using this chart:

How many pounds of dry shelled corn will come from a load of wet corn that weighs 12,680# and tests 25.7%?

12,680 x .137 = 1727.160# shrink

12,680# — 1727 shrink = 10,953

The drying charges are figured PER WET BUSHEL

12,680# ÷ 56 = 226.43 bu. x 7¢ = $15.85

Pounds of dry corn (for grain bank) 10,953#

Drying charges $15.85

Sometimes ear corn is delivered to the elevator rather than shelled corn. The load of ear corn is weighed and then the shelled corn that will come from this load is estimated because there is no way to weigh the shelled corn after shelling. This SHELL-OUT will vary with the moisture in the corn. Here is one table of shell-out for different moisture levels:

% Shell-Out	% Moisture in Corn	Pounds shelled corn in 100 pounds ear corn
80	dry corn 15.5	80 dry shelled corn
78	16.0 - 20.0	78 tough shelled corn
76	20.1 - 28.0	76 tough shelled corn
75	28.1 - 35.0	75 tough shelled corn
74	35.1 - above	74 tough shelled corn

There are three steps in figuring a problem like this:

1. Figure the shell-out to get the pounds of tough shelled corn.
2. Figure the shrinkage on this shelled corn from the chart on page 107.
3. Figure the charges from the chart.

Example: How many pounds of dry shelled corn will a farmer have to put in the grain bank, and what will the drying charges be on a load of tough ear corn that weighs 8630# and tests 29% moisture?

8630# x .75 = 6472.50# Tough shelled corn from load

6472.50# x .181 = 1171.5225# shrink

6472.5# — 1171.5# + 5301# dry corn

6472.5# ÷ 56 = 115.58 bu.

115.58 wet bu. x .08 = $9.2464

Pounds of dry corn for the bank 5301#

Drying charges $ 9.25

Figure 38: Shelled Corn Shrinkage Schedule and Drying Charges

Cash and Regular Storage

Moisture	Shrinkage	Drying Charge per wet bu.	Moisture	Shrinkage	Drying Charge per wet bu.
15.6 to 16.0	1.0%	0 ¢	23.6 to 24.0	10.4%	5 3/4 ¢
16.1 to 16.5	1.6	1/2	23.6 to 24.0	11.0	6
16.6 to 17.1	2.2	1	24.1 to 24.5	11.7	6 1/4
17.1 to 17.5	2.8	1 1/2	24.6 to 25.0	12.3	6 1/2
17.6 to 18.0	3.4	2	25.1 to 25.5	13.0	6 3/4
18.1 to 18.5	4.0	2 1/2	25.6 to 26.0	13.7	7
18.6 to 19.0	4.6	3	26.1 to 26.5	14.4	7 1/4
19.1 to 19.5	5.2	3 1/2	26.6 to 27.0	15.1	7 1/2
19.6 to 20.0	5.8	4	27.1 to 27.5	15.8	7 3/4
20.1 to 20.5	6.5	4 1/4	27.6 to 28.0	16.6	8
20.6 to 21.0	7.1	4 1/2	28.1 to 28.5	17.3	8
21.1 to 21.5	7.8	4 3/4	28.6 to 29.0	18.1	8
21.6 to 22.0	8.4	5	29.1 to 29.5	18.8	8
22.1 to 22.5	9.1	5 1/4	29.6 to 30.0	19.6	8
22.6 to 23.0	9.7	5 1/2			

Using the shrinkage schedule and drying charges (Figure 38) work the following problems:

1. How many pounds of dried shelled corn will come from a load of wet corn t that weighs 5986# and tests 27.6% moisture?

Pounds of dried corn ___________

Drying charges ___________

2. How many pounds of dried shelled corn will come from a load of wet corn that weighs 15,870# and tests 22.8% moisture?

Pounds of dried corn ___________

Drying charges ___________

3. How many pounds of dried shelled corn will come from a load of wet corn that weight 10,435# and tests 23.4% moisture?

Pounds of dried corn ___________

Drying charges ___________

In some cases the corn is delivered to the elevator in the ear instead of as shelled corn. This is then shelled and the weight of the shelled corn calculated on a shell-out basis as there is no way to weigh the shelled corn after it has gone through the sheller, The normal shell-out for dry corn is 80%, or 80 pounds of shelled corn from 100# of dry ear corn. But in the case of tough ear corn the shell-out is not this good and there may be only 75 or 76 pounds of shelled corn come from 100 pounds of this tough ear corn.

Work the following problems on the basis of shell-out:

4. How many pounds of shelled corn will come from a load of ear corn that weight 15,490#. This is dry corn that will shell out at 80% (80# of shelled corn for each 100# of ear corn).

____

5. How many pounds of dry shelled corn will a farmer have to put in the grain bank, and what will be the drying charges on the following load of corn: 14,880# tough ear corn at 28% moisture (shell-out is 76%)?

Pounds of dried corn __________

Drying charges __________

Soybean discounts: Soybeans are discounted similarily to corn with a regular discount sheet that applies to beans (Figure 39). The amount of the discount depends on how much handling, drying and cleaning is required by the processor before the beans are ready for use. The discount sheet states that discounts will be applied for conditions below these standards:

54# test weight	2% total damage
13% moisture	1% foreign material
20% splits	1% other classes

From the discount schedule (Figure 39) what discounts would be applied for the following conditions:

1. 16.3% moisture __________
2. 52.5# test weight __________
3. 25% splits __________
4. 4.3% damage __________
5. 3.0% heat damage __________
6. 3.4% foreign material __________
7. 3.5% brown beans __________

What would the discount be per bushel on beans with the following test?

8. 53# test weight
   14.8% moisture
   15% splits
   1.5% damage
   Discount per bu. __________

9. 54# test weight
   12.8% moisture
   30% splits
   Discount per bu. __________

10. With beans at $2.45 per bushel, how much is the following load of beans worth with the following test conditions?

12.680# weight
53# test weight
20% splits
13.8% moisture
3.4% foreign material

Value of load $__________

UNITED STATES DEPARTMENT OF AGRICULTURE OFFICIAL STANDARDS FOR SOYBEANS

				Maximum Limits of			
				Damaged Kernels			
Grade Number	Minimum Test Weight Per Bu. Lbs.	Moisture %	Splits %	Total %	Heat Damaged %	Foreign Material %	Brown, Black and/or bi-colored Soybeans in green, or yellow Soybeans %
1	56	13.0	10	2.0	0.2	1.0	1.0
2	54	14.0	20	3.0	0.5	2.0	2.0
3[1]	52	16.0	30	5.0	1.0	3.0	5.0
4[2]	49	18.0	40	8.0	3.0	5.0	10.0

Sample Grade: Sample Grade shall be soybeans which do not meet the requirements for any of the grades from No. 1 to No. 4, inclusive; or which are musty, sour or heating; or which have any commercially objectionable foreign odor; or which contain stones; or which are otherwise of distinctly low quality.

---

[1] Soybeans which are purple mottled or stained shall be graded not higher than No. 3

[2] Soybeans which are materially weathered shall be graded not higher than No. 4

Soybeans to be purchased and contracts written basis 54 or more pounds Test Weight; 13% moisture or less; 20% splits or less; 2% total damage or less; 1% foreign material or less; 1% other classes or less.

DISCOUNTS AS OF SEPTEMBER 1, 1965 TO APPLY ON
SOYBEANS FOR GRADES LOWER THAN NO. 1*
*This schedule subject to change without notice

TEST WEIGHT:	1/2¢ per bushel per pound or fraction thereof under 54 pounds
MOISTURE:	13.1% - 13.5% inclusive - 2 1/2¢ per bushel
	13.6% - 14.0% inclusive - 5¢ per bushel
	14.1% - 14.5% inclusive - 7 1/2¢ per bushel
	14.6% - 15.0% inclusive - 10¢ per bushel
	15.1% - 15.5% inclusive - 12 1/2¢ per bushel
	15.6% - 16.0% inclusive - 15¢ per bushel
	16.1% - 16.5% inclusive - 17 1/2¢ per bushel
	16.6% - 17.0% inclusive - 20¢ per bushel
	17.1% - 17.5% inclusive - 22 1/2¢ per bushel
	17.6% - 18.0% inclusive - 25¢ per bushel
SPLITS:	1/4¢ per bushel for each 5% or fraction in excess of 20%
DAMAGE:	1¢ per bushel for each 1% or fraction thereof in excess of 2% damage but not in excess of 8%. 1¢ for each 1/2% or fraction thereof in excess of 1/2% Heat Damage, but not in excess of 5%. Soybeans over 8% Damage or 5% Heat Damage will carry such discounts as may be agreed upon.
FOREIGN MATERIAL:	Each fraction of 1% of all foreign material in excess of 1% shall be deducted from the gross weight and will not be paid for
OTHER COLORS:	1/2¢ per bushel for each 1% or fraction thereof in excess Brown, Black, Etc. of 1%.

Soybeans which grade sour, musty, heating, weevily, over 8% damage or over 18% moisture shall be subject to such discount as may be agreed upon.

Wheat discounts: Wheat is discounted from a discount schedule (Figure 40) similar to the other grains, but there is generally less figuring with wheat. Usually the discount can just be read from the schedule. This schedule is also a little different than the others in that a premium is paid for very dry and high test weight wheat. Even though this premium is only 1¢, farmers are very proud to have grain that will qualify for this premium, and the premium should not be overlooked by the elevator operator.

From the discount schedule (Figure 40), what discounts would apply to the following conditions?

1. 57.6 test weight 14.7% moisture __________
2. 54.0 " " 16.0 " __________
3. 60.0 " " 14.3 " __________
4. 58.6 " " 16.2 " __________
5. 55.7 " " 15.8 " __________
6. 61.0 " " 13.2 " __________
7. 56.0 " " 12.0 " __________
8. 58.6 " " 14.4 " __________
9. 53.6 " " 15.2 " __________
10. 56.0 " " 13.5 " __________
11. 55.0 " " 16.0 " 6.3 damage __________
12. 57.0 " " 14.2 " 48 smut balls __________
13. 58.4 " " 14.7 " 4.3% foreign material __________
14. 56.2 " " 13.7 " 6.2% white wheat __________
15. 57.2 " " 15.7 " weevily __________

With the market price of wheat at $1.35 per bushel, what is the value of a load of wheat that weighs 8460# when the test is as follows:

58.2# test weight
14.3% moisture
5.4 damage

Value of load $__________

With wheat at $1.35 per bushel, what is the value of a load that weighs 12,000# and tests 61# and is 12.5% moisture?

Value of load $__________

Figure 40: Wheat Premium and Discount Sheet. June 1, 1965, Moisture and Test Weight Table

Moisture	60 or Better	58.0 to 59.9	57.5 to 57.9	57.0 to 57.4	56.5 to 56.9	56.0 to 56.4	55.5 to 55.9	55.0 to 55.4	54.5 to 54.9	54.0 to 54.4	53.5 to 53.9	53.0 to 53.4	52.5 to 52.9	52.0 to 52.4
13.5 or Under	+1	0	-½	-1	-1½	-2	-3	-4	-5	-6	-7½	-9	-10½	-12
13.6 to 14.0	0	-1	-1½	-2	-2½	-3	-4	-5	-6	-7	8½	-10	-11½	-13
14.1 to 14.5	-2	-3	-3½	-4	-4½	-5	-6	-7	-8	-9	-10½	-12	-13½	-15
14.6 to 15.0	-4	-5	-5½	-6	-6½	-7	-8	-9	-10	-11	-12½	-14	-15½	-17
15.1 to 15.5	-7	-8	-8½	-9	-9½	-10	-11	-12	-13	-14	-15½	-17	-18½	-20
15.6 to 16.0	-10	-11	-11½	-12	-12½	-13	-14	-15	-16	-17	-18½	-20	-21½	-23
16.1 to 16.5	-13	-14	-14½	-15	-15½	-16	-17	-18	-19	-20	-21½	-23	-24½	-26
1616 to 17.0	-16	-17	-17½	-18	-18½	-19	-20	-21	-22	-23	-24½	-26	-27½	-29

Damage

4.1 to 5.0 - 1¢ Discount
5.1 to 6.0 - 2¢ Discount
6.1 to 7.0 - 3¢ Discount
7.1 to 8.0 - 4¢ Discount
8.1 to 9.0 - 5¢ Discount
9.1 to 10.0 - 6¢ Discount
10.1 or higher - Market

Garlicky - 1000 Gram Sample

Light	4¢ Discount
7 to 12 Bulblets	8¢ Discount
13 to 25 Bulblets	10¢ Discount
26 to 50 Bulblets	12¢ Discount
51 to 100 Bulblets	16¢ Discount
101 to 150 Bulblets	20¢ Discount
151 to 300 Bulblets	30¢ Discount

Smutty - 250 Gram Sample

Light	4¢ Discount
30 to 44 Smut Balls	6¢ Discount
45 to 59 Smut Balls	8¢ Discount
60 to 75 Smut Balls	10¢ Discount
76 to 89 Smut Balls	12¢ Discount
90 to 119 Smut Balls	15¢ Discount
120 to 200 Smut Balls	20¢ Discount
201 to 250 Smut Balls	25¢ Discount
Badly Tagged	20¢ Discount
Excessive Smut	30¢ Discount

Musty or COFO
10¢ Discount

Foreign Material (Rye, Etc.)
1¢ Discount for each 1% or fraction 1.1% to 5% inclusive.

Weevily
5¢ Discount

For shrunken and broken kernels exceeding 5% - subject to market discounts.

For total defects exceeding 5% - subject to market discounts.

For wheats of other classes - if hard or spring - 1¢ discount for 5.1% to 8% inclusive, 2¢ discount for 8.1% to 10% inclusive.

For wheats of other classes - if soft red or white - 1/2¢ discount for 5.1% to 10% inclusive.

Wheat testing 60 pounds or better and grading other than No. 1 shall be allowed the premiums for testweight and shall be discounted in addition to the above as follows: damaged grains 1¢ for 2.1% to 4% inclusive, and/or foreign material 1¢ for 6/10% to 1% inclusive and/or wheats of other classes 1¢ for 3.1% to 5% inclusive, and/or shrunken and broken kernels 1¢ for 3.1% to 5% inclusive, and/or total defects 1¢ for 3.1% to 5% inclusive.

Seller guarantees that wheat supplied on contract will pass Pure Food and Drug Inspection until unloaded. Until unloaded, title remains in seller and wheat will not apply.

Dockage shall be stated in terms of half per cent, whole per cent or whole and half per cent as the case may be, with other fractions disregarded as shown in the following examples: dockage ranging from 0.5 to 0.9 per cent shall be stated as 0.5 per cent, from 1.0 to 1.4 per cent as 1.0 per cent, from 1.5 to 1.9 per cent as 1.5 per cent, etc.

D. In the discussion of buying and handling grain, the use of the scales and the making of weight tickets should be considered. Most grain is purchased over a large truck scales with the loaded truck being weighed and then the empty truck weighed after unloading. This is the basis for the settlement of the load and is very important to the farmer and to the elevator purchasing the grain. All records and settlements with farmers are made from the weight tickets.

There are simple weight tickets that just show the loaded and empty weight of the truck, and then there are scale tickets with places to record all the discounts and the quoted price for the grain, but IN EVERY CASE THIS IS THE IMPORTANT INFORMATION:

Gross ____________ lbs.
Tare ____________ lbs.
Net ____________ lbs.

The GROSS is the total weight of the loaded truck.
The TARE is the weight of the empty truck.
The NET is the difference between these two weights.

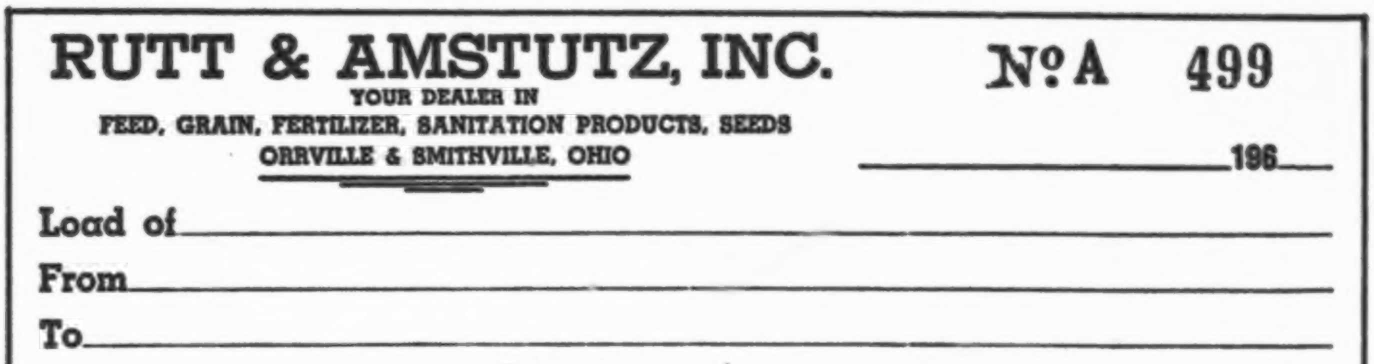
Seller's name: The name of the person selling the grain should always appear on the scale ticket. This is necessary for proper settlement of the load.

Driver: There is usually a place on the ticket to indicate whether the driver of the truck was on or off of the scales at the time the load was weighed. This could make the difference of 200 pounds or more if the driver stays in the truck when it is weighed loaded and then steps off the scales when the empty weight is taken.

Weigher: There is usually a place for the person who reads the scales to put his name or initials. This is often important if there is a question later about any of the figures on the ticket.

Shown below (Figure 41) is a sample weight ticket that provides just the name of the person selling the grain, the truck weights and the name of the person doing the weighing. On the following page (Figure 42) is a sample of a scale ticket with all the pricing information shown and a sample check (Figure 43) showing how this information is used in writing the settlement check.

FIGURE 41



RUTT & AMSTUTZ, INC. №A 499

YOUR DEALER IN
FEED, GRAIN, FERTILIZER, SANITATION PRODUCTS, SEEDS
ORRVILLE & SMITHVILLE, OHIO

____________________196___

Load of ____________________

From ____________________

To ____________________

Driver on
Driver off

Fees ____________

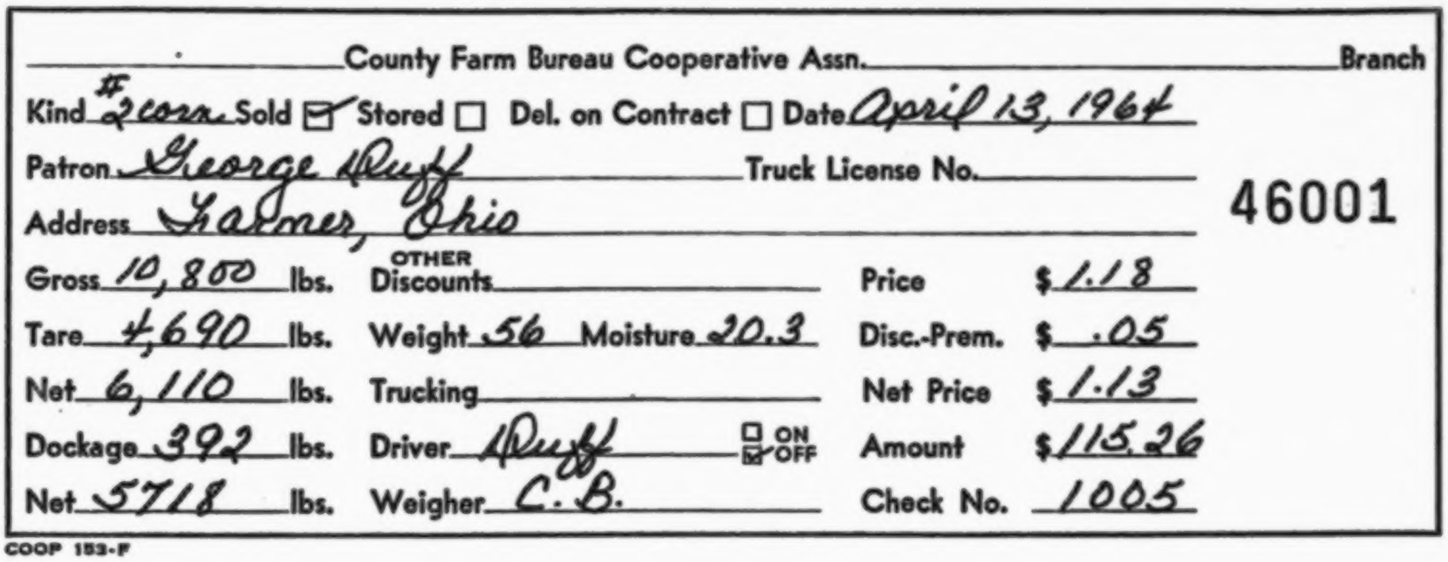
____________________ Weigher
WEIGHED ON STANDARD SCALES

Gross ____________ lbs.
Tare ____________ lbs.
Net ____________ lbs.

(Space for figuring at Left) ____________

SHELBY BUSINESS FORMS, INC., SHELBY, OHIO Δ873-1

Figure 42. Sample Weigh Bill



__________ County Farm Bureau Cooperative Assn. __________ Branch

Kind #2 corn Sold ☑ Stored ☐ Del. on Contract ☐ Date April 13, 1964

Patron George Duff Truck License No. __________

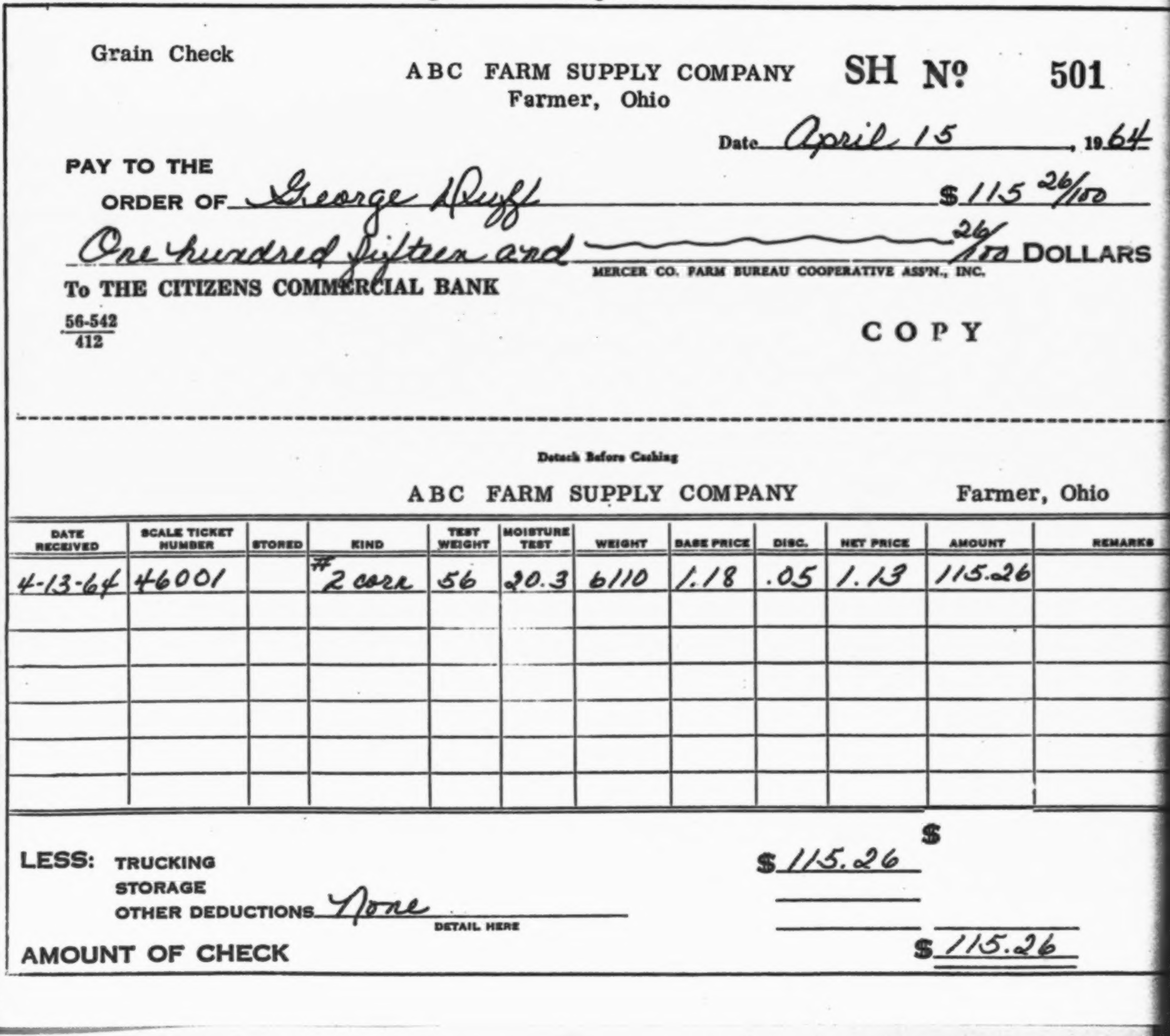
Address Farmer, Ohio

46001

Gross 10,800 lbs.	OTHER Discounts			Price	$ 1.18
Tare 4,690 lbs.	Weight 56	Moisture 20.3		Disc.-Prem.	$ .05
Net 6,110 lbs.	Trucking			Net Price	$ 1.13
Dockage 392 lbs.	Driver Duff		☐ ON ☑ OFF	Amount	$ 115.26
Net 5718 lbs.	Weigher C. B.			Check No.	1005

COOP 153-F

Figure 43. Sample Grain Check



Grain Check

ABC FARM SUPPLY COMPANY
Farmer, Ohio

SH №. 501

Date April 15, 1964

PAY TO THE ORDER OF George Duff $ 115 26/100

One hundred fifteen and 26/100 DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK

56-542
412

COPY

Detach Before Cashing

ABC FARM SUPPLY COMPANY Farmer, Ohio

DATE RECEIVED	SCALE TICKET NUMBER	STORED	KIND	TEST WEIGHT	MOISTURE TEST	WEIGHT	BASE PRICE	DISC.	NET PRICE	AMOUNT	REMARKS
4-13-64	46001		#2 corn	56	20.3	6110	1.18	.05	1.13	115.26	

$

LESS: TRUCKING $ 115.26

STORAGE

OTHER DEDUCTIONS None DETAIL HERE

AMOUNT OF CHECK $ 115.26

For these problems we need a sheet with three weigh bills and a sheet with one settlement check. All three loads are going on one check. For practice, write up the following information on scale tickets and transfer this information to the grain settlement check. Use your discount sheets and make a scale ticket for each load of grain. Put all three loads on one settlement check and write the check for the total of the loads.

Mr. John Farmer, Your Town

Load of wheat, gross weight 18,680#, tare weight 6500#, no dockage, test weight 56.2, moisture 14.3%, damage 5.2%, driver was Tom who stayed on the truck, you are weigher. Base price before discount is $1.35 per bu. grain sold.

Load of soybeans gross weight 23,989, tare weight 8900#, 3.4% foreign material, test weight 52#, moisture 14.7%, splits 15%. Beans are sold and base price before discount is $2.45 per bu. The driver is Don who got out of the truck and was in the office when the truck was weighed both loaded and empty. You are the weigher.

Load of shelled corn, gross weight 15,550#, tare weight 6800#, test weight is 52#, moisture is 21.7%, foreign material is 4.6% damaged grain is 4.0%. Base price before discount is $1.15 per bu. Corn is sold. The driver is Jack who stayed on the truck, and you are weigher.

E. Storage and warehouse receipt:

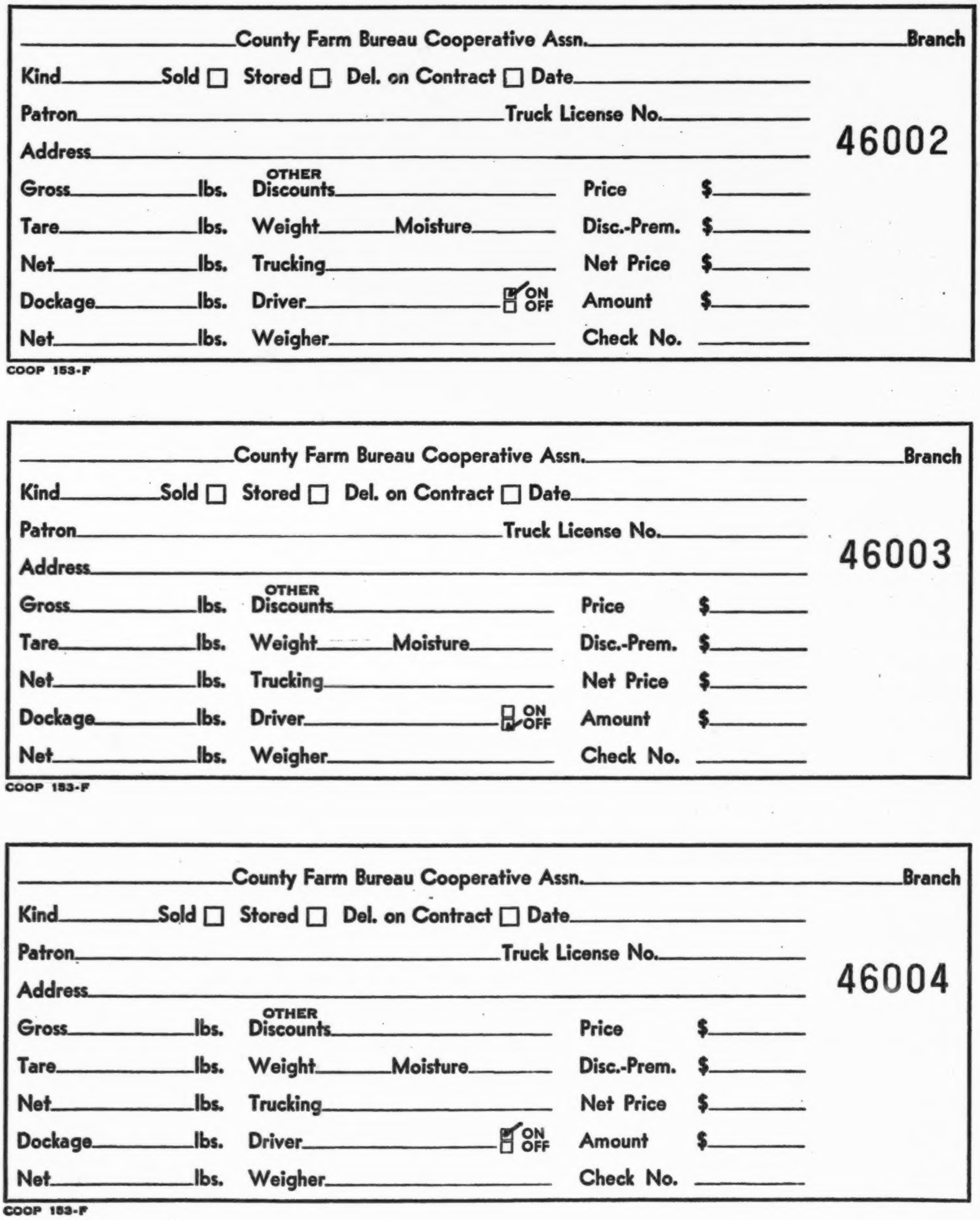
Notice on the scale ticket that there is a place to check if the grain is to be stored instead of being sold. This is a common practice with many farmers and elevators. Most elevators that do a lot of storing are licensed either by the Federal or the State government which means that they are inspected by these agencies, and the farmer has some protection that his grain will be stored properly. To keep the records for these licensed warehouses a warehouse receipt is issued to the farmer. This piece of paper is almost as good as money and can be used as security in borrowing money or making loans.

Notice that there is a place on the scale ticket to check if the grain is to be stored and not sold. It is the responsibility of the person doing the weighing to determine what is to be done with the load. Figure 46 shows a sample of a warehouse receipt that is given to the farmer as evidence that he has this much grain in storage at the elevator. Note that it specifies the kind and quality of product being stored.

In the past there has been some risk in the farmer storing grain at the elevator. In some cases the elevator operator would sell the farmer's grain and use this money for his own purposes figuring on buying the grain back at a better price before the farmer wanted the grain or wanted to sell it. It sometimes worked out that the elevator operator could not buy back the grain at a lower price, and this got him in financial trouble.

To guard against such practices, the Government set up some storage regulations that require the elevator to have this grain on hand at all times and to give the farmer a receipt guaranteeing that he could deliver this grain when called upon. These receipts are called WAREHOUSE RECEIPTS (Figure 46, page 118).

Figure 44.



County Farm Bureau Cooperative Assn. Branch

Kind Sold ☐ Stored ☐ Del. on Contract ☐ Date

Patron Truck License No.

Address

46002

Gross lbs.	OTHER Discounts		Price $
Tare lbs.	Weight	Moisture	Disc.-Prem. $
Net lbs.	Trucking		Net Price $
Dockage lbs.	Driver	☑ ON ☐ OFF	Amount $
Net lbs.	Weigher		Check No.

COOP 153-F

County Farm Bureau Cooperative Assn. Branch

Kind Sold ☐ Stored ☐ Del. on Contract ☐ Date

Patron Truck License No.

Address

46003

Gross lbs.	OTHER Discounts		Price $
Tare lbs.	Weight	Moisture	Disc.-Prem. $
Net lbs.	Trucking		Net Price $
Dockage lbs.	Driver	☐ ON ☑ OFF	Amount $
Net lbs.	Weigher		Check No.

COOP 153-F

County Farm Bureau Cooperative Assn. Branch

Kind Sold ☐ Stored ☐ Del. on Contract ☐ Date

Patron Truck License No.

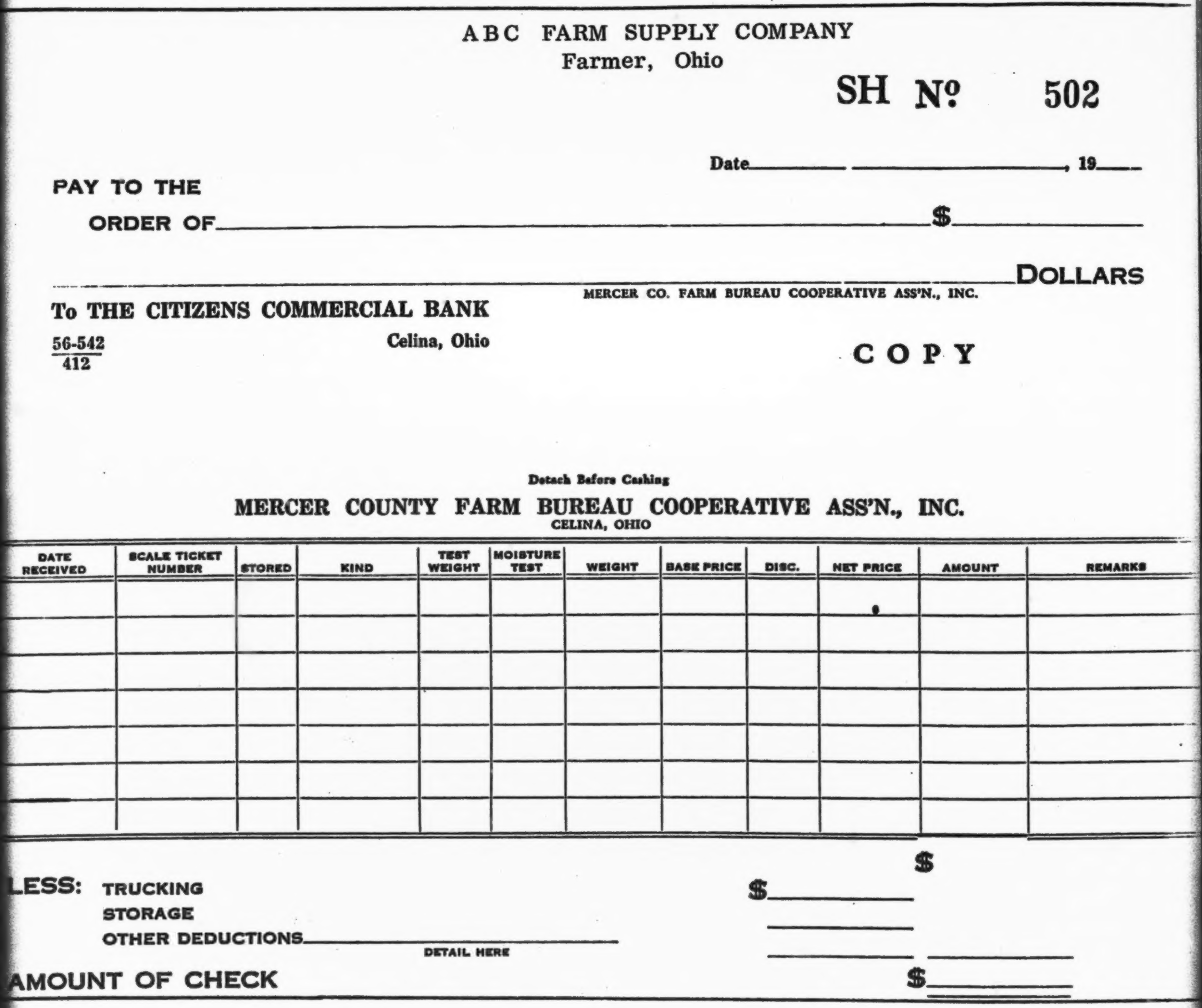
Address

46004

Gross lbs.	OTHER Discounts		Price $
Tare lbs.	Weight	Moisture	Disc.-Prem. $
Net lbs.	Trucking		Net Price $
Dockage lbs.	Driver	☑ ON ☐ OFF	Amount $
Net lbs.	Weigher		Check No.

COOP 153-F

Figure 45.



ABC FARM SUPPLY COMPANY
Farmer, Ohio

SH № 502

Date________ ________________, 19___

PAY TO THE
ORDER OF____ **$**__________

____ **DOLLARS**

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
Celina, Ohio

56-542
412

COPY

Detach Before Cashing

MERCER COUNTY FARM BUREAU COOPERATIVE ASS'N., INC.
CELINA, OHIO

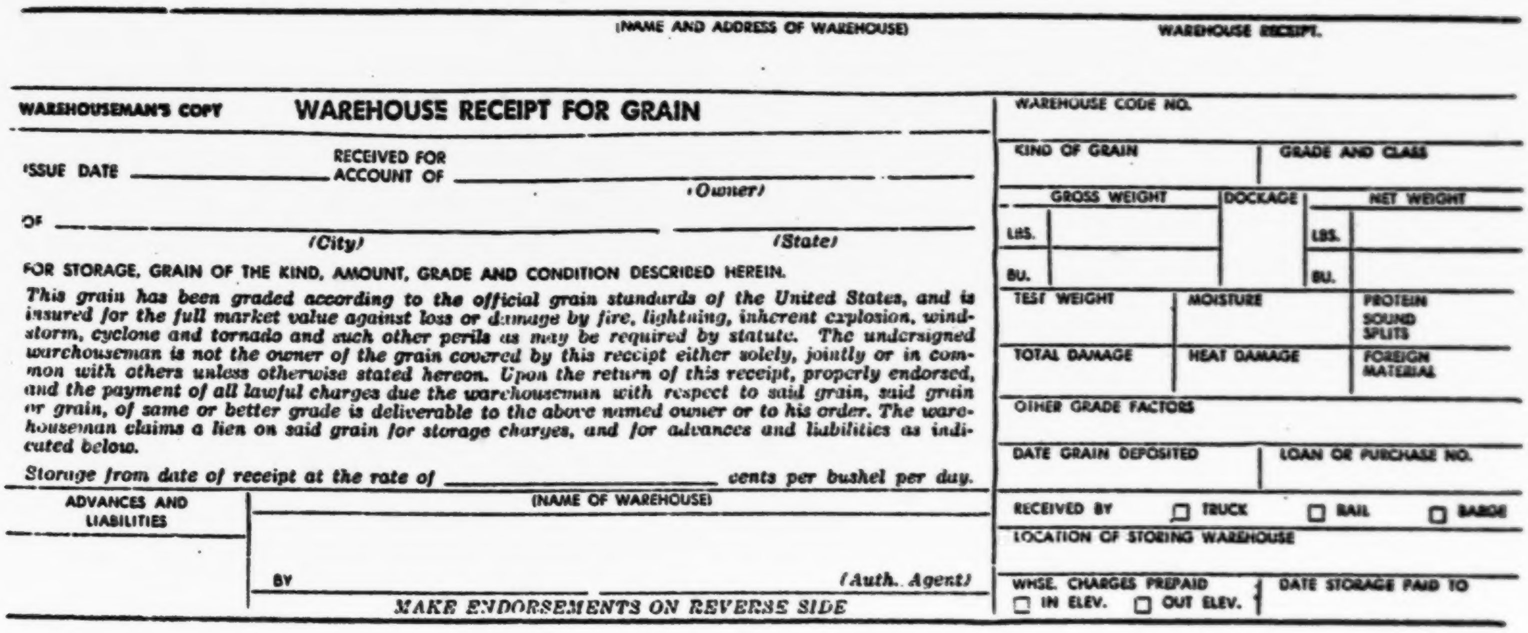
DATE RECEIVED	SCALE TICKET NUMBER	STORED	KIND	TEST WEIGHT	MOISTURE TEST	WEIGHT	BASE PRICE	DISC.	NET PRICE	AMOUNT	REMARKS

$

LESS: TRUCKING **$**__________
STORAGE __________
OTHER DEDUCTIONS____________________ __________ __________
DETAIL HERE

AMOUNT OF CHECK **$**__________

Figure 46. Warehouse Receipt



(NAME AND ADDRESS OF WAREHOUSE)

WAREHOUSE RECEIPT.

WAREHOUSEMAN'S COPY **WAREHOUSE RECEIPT FOR GRAIN**

ISSUE DATE ____________ RECEIVED FOR ACCOUNT OF ____________ *(Owner)*

OF ____________ *(City)* ____________ *(State)*

FOR STORAGE, GRAIN OF THE KIND, AMOUNT, GRADE AND CONDITION DESCRIBED HEREIN.

This grain has been graded according to the official grain standards of the United States, and is insured for the full market value against loss or damage by fire, lightning, inherent explosion, windstorm, cyclone and tornado and such other perils as may be required by statute. The undersigned warehouseman is not the owner of the grain covered by this receipt either solely, jointly or in common with others unless otherwise stated hereon. Upon the return of this receipt, properly endorsed, and the payment of all lawful charges due the warehouseman with respect to said grain, said grain or grain, of same or better grade is deliverable to the above named owner or to his order. The warehouseman claims a lien on said grain for storage charges, and for advances and liabilities as indicated below.

Storage from date of receipt at the rate of ____________ *cents per bushel per day.*

ADVANCES AND LIABILITIES

(NAME OF WAREHOUSE)

BY ____________ *(Auth. Agent)*

MAKE ENDORSEMENTS ON REVERSE SIDE

WAREHOUSE CODE NO.

KIND OF GRAIN | GRADE AND CLASS

GROSS WEIGHT: LBS. / BU. | DOCKAGE | NET WEIGHT: LBS. / BU.

TEST WEIGHT | MOISTURE | PROTEIN SOUND SPLITS

TOTAL DAMAGE | HEAT DAMAGE | FOREIGN MATERIAL

OTHER GRADE FACTORS

DATE GRAIN DEPOSITED | LOAN OR PURCHASE NO.

RECEIVED BY ☐ TRUCK ☐ RAIL ☐ BARGE

LOCATION OF STORING WAREHOUSE

WHSE. CHARGES PREPAID ☐ IN ELEV. ☐ OUT ELEV. | DATE STORAGE PAID TO

F. Storage charges:

In a study of grain handling some consideration should be given to grain storage. As acres per farm are being increased and yields per acre go up, there is more demand for storage space for harvested crops. In many cases it is an advantage to store these crops for sale later in the year. This storage may be done on the farm or may be a service offered by the local elevator. If the local elevator does the storage, there must be some charges made. These charges will include:

1. Cost of the building
2. Cost of the machinery for handling
3. Labor costs in handling
4. Insurance while in the elevator
5. Shrinkage (The farmer always gets paid for the number of pounds that he puts in. But there is some natural shrinkage in handling that cannot be helped.)

The normal storage charges are:

1 1/2¢ per bushel per month

or

1/20¢ per bushel per day

These charges are the same, but the 1/20¢ per day allows the operator to figure charges to the very day that the grain has been in storage.

$$1/20 \times 30 = 30/20 = 1\ 1/2$$

Some problems on figuring storage will help in understanding these charges.

Example: A farmer has 520 bu. of wheat in storage from July 15 to March 15. What are the storage charges at 1 1/2¢ per bu. per month?

8 mo. @ 1 1/2¢ = 12¢ per bu. x 520 bu. = $62.40

$62.40

A farmer has 1040 bu. corn in storage from October 20 to January 3. What are the storage charges at 1/20¢ per day?

October 20 to November 20 -- 30 days
November 20 to December 20 -- 30 days
December 20 to January 3 -- 14 days (count January 3)
74 days

74 x 1/20 = 3.7¢ x 1040 bu. = $38.48

$38.48

Figure the following storage problems:

1. A farmer stores 680 bu. of soybeans from October 30 to February 30 at 1 1/2¢ per bu. per month.

__________ storage charges

2. A farmer stores 1450 bu. wheat from July 20 to December 10 at 1/20¢ per bu. per day.

__________ storage charges

3. A farmer stores 1400 bu. shelled corn at harvest, October 18. He decides to sell half of this before the end of the year on December 18. The rest he keeps in storage until February 18. What are the storage charges at 1 1/2¢ per bu. per month?

__________ storage charges

4. How much will a farmer make by storing his wheat crop? The price at harvest time is $1.25 per bu., but in January it has gone up to $1.53 per bu. He stored 1800 bu. from July 15 to January 15. How much extra income did he realize with storage at 1 1/2¢ per bu. per month?

$__________

CHAPTER X: One Month Problem.

On the following pages a problem has been outlined representing the business during one month for a number of farmer customers. The figures and records are to be completed for each day's business just as they might be done in a local elevator. The following types of items are included:

Assume that you are working for the A to Z Farm Supply Company:

1. Sales slips: Some will be cash and some will be charged. A sales slip should be made for all payments on account. A sales slip should be made for grain transactions.
2. Account records: Keep a separate account card for each customer. All charges and payments are on account to be recorded.
3. Purchase orders: Purchase orders are to be completed for items added to inventory.
4. Perpetual inventory: Each day items that are sold are to be subtracted from the inventory record and items added as they are received from the supplier.
5. Sales tax: Sales tax is to be added to the sales slip where this is applicable. Generally speaking, items used in production of goods for sale are tax exempt. Items used around the house or for personal consumption are taxable.
6. Discounts: Discounts are to be applied where applicable. These discounts are shown on the price list.
7. Daily cash balance: A daily cash balance is to be recorded. The formula for this cash balance is shown below:

   Cash on hand __________

   Plus Cash taken in during the day __________

   Minus Any cash out during the day __________ (Cash out can be money paid out or bank deposits made.)

   Equals ----------------- Balance: __________

8. Monthly bank balance: At the end of the month the bank balance is to be figured from the deposits made and checks written.
9. Grain accounts: During this month grain will be delivered to the elevator to be stored in the grain bank, or grain may be taken from the grain bank to be used in feed mixes, or grain may be sold to the elevator or applied on account. A special record of all these transactions must be made.

TEACHER DIRECTIONS: (Problem 1, page 122)

Forms for this problem may be secured from a local business or they may be reproduced at the school. Completed forms and daily answers to this problem are found in the test and answer supplement.

STUDENT DIRECTIONS:

Complete each day's business as a unit. Make all the entries for this day and then go on to the next.

Problem 1: Calculating Cash-on-Hand and Bank Balance.

Figure the cash on hand at the beginning of the day's business on May 1 from the following coins, bills and checks in the cash drawer:

Number	Species	Amount
32	1¢ coins	________
41	5¢ "	________
16	10¢ "	________
22	25¢ "	________
18	50¢ "	________
	Currency	
38	$ 1 bills	________
12	$ 5 "	________
8	$10 "	________
6	$20 "	________
Checks as follows:		$142.51
		16.00
		34.87
		19.24
		5.00
		18.62
		542.16

Cash on hand at beginning of business May 1: ________

For each day's business fill out the following form: (Copies provided at the end of this section.)

____
Date

Cash on hand at the beginning of the day: ________

Money taken in (cash and checks): ________

TOTAL ________

Cash taken out during day: ________
(Cash paid out or bank deposits,
not checks written)

New balance on hand: ________

BANK BALANCE FROM THE APRIL 30 BANK STATEMENT----------$18,568.94

This balance will be used at the end of the month to check the company books with the bank statement.

ACCOUNTS RECEIVABLE BALANCE AT BEGINNING OF BUSINESS MAY 1 -$12,928.62

Problem 2: Making the Daily Business Report. Use price list on page 143.

STUDENT DIRECTIONS:

Be careful of names -- some names in the report are similar. This is done on purpose to keep the student alert.

Cash or charge -- be sure to mark the sales slip cash or charge. This will be necessary in determining your daily cash balance and posting to accounts.

Dates -- be sure each slip is dated. This needs to correspond with dates on the account record.

DAILY BUSINESS TRANSACTIONS - May 1 to May 30

May 1 John Wilson and Son (cash) purchased:
5 sacks of Beefmaker
5 gal. motor oil (pleasure car) - $7.25 (should be $9.25, but use $7.25 to balance)
5 bales twine
1 5# box vegetable dust (garden)

Abel T. Jones (charge) bought:
2 Tons 6-24-12
3 Tons 5-20-20

Earl Tucker (charge) bought:
2 Tons 5-20-20
1 Ton 33-0-0
3 bu. seed corn - $30.90 (should be $21.05, but use $30.90 to balance)
1 qt. household fly spray

Larry Erwin (cash) had a load of grinding that weighed 2460#. He added:
500# dairy supplement
200# bran
100# mineral
He took home a 50# bag of calf starter
and 2 blocks of salt

A load of fertilizer came in from the GOOD PLANT FOOD COMPANY.
(Write a check for this and add to inventory.)

10 Tons 6-24-12 @ $58.50
7 Tons 5-20-20 @ $61.00
3 Tons 33-0-0 @ $88.00

May 2 James Hinfield (charge) purchased:

15 bales of baler twine
5# lawn seed
2 salt blocks

Wilson George (cash) brought in a load of ear corn to be put in the grain bank. The weight of the load of corn was 12,680#. This shelled out at 81% shelled. corn. This corn will go on an account card for Wilson George but will not go into the inventory of the company. Make a sales slip for the shelling and a sales slip for the pounds of corn to go in the bank.

Steve Smith (charge) bought:

2000# shelled corn
(corn was ground)
300# Porkmaker

Emery Tucker (charge) bought:

2 Tons 33-0-0
3 bu. seed corn - $30.90 (should be $31.05, but use
3 5# bags of Atrazine $30.90 to balance)

Abel T. Jones (check on account) paid:

$200 on his fertilizer bill.

A bank deposit was made on this date: $100 in bills plus all the checks that were on hand May 1 plus the $200 check from Abel Jones.

May 4 George Wilson (paid by check) brought in a load of corn to be shelled and ground for hog feed. The load weighed 8850# (ear corn) and shelled out at 80%.

He added:

800# Porkmaker
50# mineral

He bought:

5# lawn seed
1 2# rose dust
2 qt. motor oil (for car)

James Hinfield (charge) bought:

1 ton Porkmaker
500# soybean meal
300# linseed meal
3 salt blocks

Earl Tucker (paid by check) bought:

1000# oats and had this
ground with 1800# of his ear corn
500# dairy supplement
200# bran
10 bales baler twine

He also paid by check:

$50 on his account

After looking at the inventory sheet for this day, the manager decided that he should order some feed, seed and twine. Make purchase orders for the following items:

From the BEST KNOWN ANIMAL FEEDS CO. (Purchase Order No. 1)

2 tons Beefmaker @ $92.00
3 Tons Porkmaker @$104,00
1 Ton dairy supplement @ $95.00

From the RELIABLE SEED CO. (Purchase Order No. 2)

50# lawn seed @ $ .75
25 bu. seed corn @ $9.00

From the KNOTTY TWINE CO. (Purchase Order No. 3)

50 bales baler twine @ $8.60

These supplies are to be shipped by truck and you need them within one week.
They are to be paid for within 10 days.
You sign as the buyer.

May 5 Wilson George (charge) took 3000# of shelled corn from his grain bank and had this ground.

He added:
500# Porkmaker
100# mineral

He took home:
100# ryegrass for pasture
10 1# lube tubes for machinery

Larry Erwin (charge) bought:
3 Tons shelled corn
3 bu. seed corn - $30.90 (should be $31.05, but use
5 1 gal. oil for tractors $30.90 to balance)

Steve Smith (charge) bought:
800# shelled corn and
500# oats that he had ground

He added:
300# soybean meal
300# bran
200# linseed meal
50# mineral

May 6 Abel T. Jones (charge) bought:
1 Ton shelled corn
1/2 Ton Beefmaker
3 blocks salt
1 qt. household fly spray
2 qt. oil for tractor

He paid by check the balance of his fertilizer bill.

John Wilson and Son (charge) bought:
1 Ton 33-0-0
2 bu. seed corn
1 5 gal. can 2-4-D
3 5# bags Atrazine

Emery Tucker (cash) bought:
1 bu. seed corn
2 1 gal. 2-4-D

Wilson George (charge) bought:
4 Tons 6-24-12 fertilizer
2 Tons 5-20-20 fertilizer
5 bales baler twine

May 7 Wilson George brought in a load of ear corn to sell and put on his account. This load of corn weighed 13,200#. He was not charged for shelling because he is selling it. Ear corn is worth $1.80 per hundred. The office wrote him a check for this so that it would be on their records and then he endorsed the check and gave it back to them to apply on his account. Be sure to make the following entries: (make out sales slip for the transaction)

(check) Credit account from corn
Shelled corn for inventory (80% shell-out)
Check written to Wilson George

Emery Tucker (cash) bought:
3# lawn seed
1 2# rose dust
1 5# vegetable dust

James Hinfield (charge) bought:
5 Tons 6-24-12 fertilizer

The feed from Purchase Order No. 1 arrived. The manager sent a check back with the driver. You sign the check as manager.

Write check
Enter in Inventory

May 8 Robert Adams (charge) bought:
1 Ton Beefmaker
1 Ton shelled corn
1/2 Ton oats
500# soybean meal
500# bran
500# linseed meal

Larry Erwin sold a truck load of oats to the elevator. The load weighed 8230#, and the price of oats is 70¢ per bushel. The office wrote a check for this. He endorsed this and turned it in on his account. Make out sales slip for the transaction. Add to inventory.

Steve Smith (charge) bought:
1 Ton 5-20-20 fertilizer
400# 33-0-0
1 bu. seed corn

May 9 From the inventory records the manager saw that he should order another load of fertilizer, so he filled out the Purchase Order No. 4 for the GOOD PLANT FOOD CO. for:

8 Tons 6-24-12 @ $58.50
7 Tons 5-20-20 @ $61.00
5 Tons 33-0-0 @ $88.00

John Wilson and Son (charge) bought:
1 Ton Porkmaker
5 gal. motor oil (tractors)
5 bales twine

(check) Paid $100.00 on their account

Earl Tucker (cash) bought:
1 bu. seed corn
1 gal. 2-4-D
1 qt. household fly spray
3 qt. motor oil for lawn mowers

Larry Erwin (charge) bought:
50# ryegrass seed to plant in corn field
2 bags 5-20-20 fertilizer for garden (50# bags)

A bank deposit was made with $ 180 in cash and all the checks taken in from May 4 through May 9.

May 11 Robert Adams (charge) bought:
4 Tons 5-20-20
1 Ton 6-24-12
2 bu. seed corn.

James Hinfield (check) paid:
$500.00 on his account
(prepare sales slip)

Abel T. Jones (charge) bought:
1000# soybean meal
500# linseed meal
200# mineral
2 blocks salt

Emery Tucker (charge) bought:
800# oats and had this ground
200# Porkmaker
20# mineral
3 bags calf starter
5 bales twine

The seed came in from Purchase Order No. 2. A check was written for this amount.

There was a trucking charge of $4.50 on this seed which was paid out of the cash register in CASH to the driver.

May 12 George Wilson (charge) bought:

1 Ton 5-20-20
2 1 gal. 2-4-D
1 bu. seed corn

The fertilizer came in from Purchase Order No. 4. A check was written for this and sent with the driver.

John Wilson and Son (charge) had a load of grinding. They purchased:

5420# grinding
500# soybean meal
300# bran
30# mineral

Larry Erwin (cash) bought:

5# lawn seed
1 5# vegetable dust

May 13 Wilson George (charge) took:

3200# of corn from the grain bank and had this ground with
500# Porkmaker
100# mineral
20# rye grass for pasture
10 bales twine - $ $103.00 (should be $102.00, but use $103.00 to balance)

The twine came in from Purchase Order No. 3. A check was written and sent to the company.

The manager decided to get a load of feed. Make a purchase order for (No. 5) (use unit price from inventory sheet):

2 Tons soybean meal
2 Tons linseed meal
1 Ton bran
1 Ton mineral

This was picked up by an A to Z Farm Supply Company truck from the FARMER'S WHOLESALE COMPANY.

The manager sent a check along with the driver. Make this check out and you sign it as manager.

Steve Smith (check) paid:
$100.00 on his account

Abel T. Jones (cash) bought:
1 5 gal. 2-4-D

May 14 James Hinfield finished planting corn and had a few bags of fertilizer left. He didn't want these laying around until next year, so he brought them back to the elevator. He returned 8 bags (50#). To make it easy, the manager figured what he had paid for these and paid him cash for them (CASH OUT). Look up the kind of fertilizer that Mr. Hinfield had purchased and figure how much cash he would get back. Add to inventory.

Earl Tucker (check) paid:
Balance on account

Robert Adams bought a 5 ton load of shelled corn. The manager told him he would give him a 3% discount in addition to the tonnage discount if he paid for it today. Mr. Adams then wrote a check for the amount of this corn.

Steve Smith (charge) has a load of grinding 1860#,
200# dairy supplement
200# bran
50# mineral
1 bag calf starter

John Wilson and Son (charge) bought:
1 Ton 5-20-20 fertilizer

May 15 James Hinfield (charge) bought:
500# oats
500# Beefmaker
200# bran
3 blocks salt

He also wrote a check:
$100.00 on his account

Abel T. Jones (charge) bought:
3 Tons shelled corn
1 Ton Beefmaker
3 gal. oil for tractors

Emery Tucker (cash) bought:
5 bales twine

George Wilson (charge) bought:
1/2 Ton soybean meal
1/2 Ton dairy supplement
300# mineral
4 sacks calf starter

May 16 Before any charges were made for the 16th, the manager wanted to know what the total amount in the accounts receivable was as of the end of business on May 15. He asked the office clerk to get this figure for him. Find this figure by taking the outstanding balance on accounts at the beginning of the month plus the current balance on all accounts receivable ledger cards.

Larry Erwin (charge) bought:
1 5 gal. 2-4-D
1 5# vegetable dust
2 lube tubes for garden tractor

Earl Tucker (charge) bought:
500# soybean meal
200# linseed meal
2 bales twine

Wilson George (check) paid:
$120.00 on his account

A bank deposit was made on this date. This included $200.00 in cash and all checks taken in from May 11 to May 16, inclusive.

May 18 Salesman Joe Smith, who sells petroleum and chemical products for the Ace Chemical Company, stopped in. After looking at the inventory record the manager decided to order some things from him. Make up Purchase Order No. 6 for the following items. Use unit price on inventory for cost price.

5	5 gal. 2-4-D
10	1 qt. household spray
20	1 gal. motor oil
24	lube tubes

This is to be shipped within one week by Commercial Freight Truck Lines. You sign the purchase order as the manager. This material would normally be taxable, so fill out sales tax exemption form for resale.

Robert Adams (charge) bought:

1 Ton shelled corn
1/2 Ton Porkmaker
300# soybean meal

(check) Paid $350.00 on his account

Wilson George brought another load of corn in for the grain bank. This load weighed 9460# and shelled out at 82%.

(charge) for the shelling
add shelled corn to the grain bank
(not inventory)

Abel T. Jones (charge) bought:
2 Tons 33-0-0 for sidedressing his corn.

Steve Smith (cash) bought:
5 gal. 2-4-D

May 19 The manager decides to order load of commercial feed. Make out Purchase Order No. 7 for these items. (Use inventory unit price.)

3 Tons Beefmaker
2 Tons Porkmaker
1 Ton dairy supplement

Since he is low on the Beefmaker he decides to send an A to Z Farm Supply Company truck for it today. He sends a check with the truck driver for this to the Best Known Animal Feeds Company.

The driver had to buy $4.00 worth of gasoline to make the trip. He paid for the gasoline, and the manager gave him $4.00 cash out of the cash register. (Cash Out)

Emery Tucker (charge) bought:
1000# shelled corn
1000# oats
had these ground -(2000#)
200# soybean meal
200# linseed meal
50# mineral

Earl Tucker (cash) bought:
4# lawn seed
1 5# vegetable dust

John Wilson and Son (check) paid:
$250.00 on account

Larry Erwin (charge) bought:
500# Porkmaker
200# bran
3 bags calf starter

May 20 James Hinfield (charge) bought fertilizer for late planting of corn:
1 Ton 6-24-12
1 Ton 5-20-20
3 bu. seed corn

Steve Smith (charge) had:
1860# load of grinding
300# Porkmaker
20# mineral
2 salt blocks
1 qt. household fly spray

Earl Tucker (charge) bought:
500# Porkmaker
300# soybean meal
200# bran
50# mineral

George Wilson (cash) bought:
1 5# Atrazine
1 5# vegetable dust
2# lawn seed

John Wilson and Son (charge) bought:
2 bales twine

May 21 There have been some changes in feed prices, so the manager changes his prices. Even though he has just purchased a load of feed two days ago he must reduce his prices according to the market to meet competition. Use the following prices and figure the percentage for feeds and change these prices on your price list (to the nearest 5¢).

Beefmaker	$88.00
Porkmaker	97.00
Dairy supplement	92.00
Soybean meal	65.00
Linseed meal	76.00

He sees that the rose dust is not moving, so he reduces this price to his cost price to try to sell it in order not to have to carry it over.

Robert Adams (charge) bought
2 5# Atrazine
500# soybean meal
2 bags calf starter

Abel T. Jones (check) paid:
$350.00 on his account
Prepare sales slip.

Wilson George (charge) took 2000# of corn from the grain bank for grinding.

He added:
500# soybean meal
400# oats
200# bran

He took home:
1 block salt

May 22 The material came in from Purchase Order No. 6 from the Ace Chemical Co. A check was written for this order. You sign as manager.

Steve Smith sold a load of corn to the elevator. He needed the money so he did not leave any of this on his account. A check was written to him for it. The load weighed 9520# (ear corn), and the price of ear corn was $1.75. The corn shelled out at 80%. Put in inventory.

John Wilson and Son (charge) had a load of grinding.
4810# grinding
800# Porkmaker
100# mineral
2 bags calf starter

Robert Adams (cash) bought:
10 bags 5-20-20 fertilizer to finish planting corn.
(50")

Larry Erwin (charge) bought:
1000# shelled corn
500# soybean meal
10# rye grass to seed around the barn yard

May 23 Emery Tucker (check) paid:
balance on his account

James Hinfield (charge) bought:
3 Tons shelled corn
1000# soybean meal
500# linseed meal
5 bales twine

Abel T. Jones (charge) bought:
2 5# Atrazine
1 5 gal. 2-4-D
1 5# vegetable dust

Earl Tucker (cash) bought:
3 qt. oil for car
1 qt. household spray
2 2# rose dust

A bank deposit was made. There was not much cash in the register, so this deposit was only checks from May 18 to May 23 inclusive.

May 25 Robert Adams (charge) bought:
2 Tons shelled corn
1 Ton oats
1 Ton Beefmaker
500# mineral

James Hinfield (charge) bought:
10 gal. of oil for his tractors
10 lube tubes " " "

This late in the season the elevator was overstocked with fertilizer, so the manager offered to sell some fertilizer at a reduced price. For 5 tons or more he would allow an additional 5% discount besides the tonnage discount, and another 2% discount if it were paid for now. (Figure tonnage discount first, then 5%, then 2%)

Wilson George (check) took advangage of this offer and bought:
3 Tons 6-24-12
3 Tons 5-20-20

He wrote a check for this.

Steve Smith (check) bought:
2 Tons 6-24-12
1 Ton 5-20-20

This qualified for the 5% and 2% but not the tonnage discount.

Earl Tucker (cash) had a load of grinding:
2380# grinding
500# Porkmaker
50# mineral
5 2# dust rose

He took advantage of the reduced price on the rose dust.

May 26 Emery Tucker (charge) bought:
1/2 Ton Beefmaker
500# bran
3 bags calf starter
100# mineral

George Wilson (charge) bought:
3 Tons 6-24-12
2 Tons 5-20-20

Bought on the special deal, but he didn't have the money to pay now, so did didn't get the 2% discount.

Larry Erwin (charge) bought:
5 gal. 2-4-D

Abel T. Jones (check) paid:
Balance on his account
Prepare sales slip

Steve Smith (charge) had a load of grinding
1590# grinding
300# oats
200# bran
500# linseed meal
50# mineral
8 bales twine

May 27 John Wilson and Son (charge) bought:
- 2 Tons of oats
- 1/2 Ton Beefmaker
- 4 bags calf starter
- 2 5# bags of Atrazine

The seed company said that they would take back any seed corn that the manager didn't want to keep. They would pay the same price as the elevator had paid for it.

(check) The manager decided to send back 20 bushels.

Robert Adams (charge) bought:
- 7 bales of twine

Wilson George decided to take some of the corn from his grain bank and apply it on his account. He decided to sell 6000# of this (shelled corn). The price of corn is now $1.70 per 100# ear corn. Convert this price to shelled corn, write him a check for it, and he will endorse the check back for his account. (Take from grain bank and add to inventory.)

(check) on account

James Hinfield (charge) bought:
- 2 Tons shelled corn
- 1/2 Ton Porkmaker
- 500# linseed meal

May 28 Wilson George (charge) took corn from the grain bank for grinding:
- 2000# grinding
- 400# Porkmaker
- 100# mineral
- 2 salt blocks

Abel T. Jones (cash) bought:
- 3 qt. oil for the car
- 1 qt. household spray
- 3 2# rose dust

Steve Smith (charge) bought:
6 bales twine

Emery Tucker (charge) bought:
500# dairy supplement
500# linseed meal
300# bran
200# mineral
5 gal. 2-4-D

George Wilson (cash) bought:
5 bales twine
5 gal. oil for tractors
2 qt. oil for car
1 qt. household fly spray
2 2# rose dust

May 29 Larry Erwin (charge) bought
1/2 Ton oats
500# dairy supplement
300# bran
50# mineral
2800# grinding
3 1 gal. 2-4-D for spot treatment in the corn field.

James Hinfield (check) decided to sell some wheat to pay on his account. He brought in two loads. The two loads weighed as follows:

8854# 58# 14.2%
6420# 56# 13.8%

The base price for wheat is $1.52 per bu.

Write out a grain settlement check for this which he will endorse and turn back in on the account.

John Wilson and Son (check) paid:
$250.00 on account

Robert Adams (check) bought:
3 Tons 33-0-0 on the discounted pricing
(He paid for this)

May 30 Abel T. Jones (cash) bought:
5 bales of twine

Steve Smith (charge) had a load of grinding:
2180# grinding
200# soybean meal
300# linseed meal
100# mineral
1 salt block

Emery Tucker (charge) bought:
5 gal. oil for tractors
3 5# vegetable dust he will use on pickles that he sells to the pickle factory.

George Wilson (charge) bought:
500# Beefmaker
300# linseed meal
100# mineral
1 salt block

Earl Tucker (charge) bought:
1 bu. seed corn for replanting
1/2 Ton 5-20-20 at regular price
2 1 gal. 2-4-D

Make a bank deposit. $100.00 in cash plus all the checks taken in from May 25 to May 30, inclusive.

Figure 47. INVENTORY

Below are listed the items of inventory that are on hand at the end of the month of April. These figures will be the beginning inventory for the month of May. Figure the value of each of these items for the amount column. Enter the quantity figure as the "on hand" figure for the perpetual inventory form for the month of May.

Actual Count			Description of Items	Unit	No. of Units	Unit Price		Amount	
		(67,200#)	No. 2 Shelled corn	Bu.		$ 1	15		
		(9,600#)	Oats	Bu.			70		
			Feed						
	1000#	1400#	Beefmaker	Ton		92	00		
	2000#	1800#	Porkmaker	Ton		104	00		
		1500#	Dairy Supplement	Ton		95	00		
1000#	2000#	1000#	Soybean Meal	Ton		70	00		
		2100#	Linseed Meal	Ton		80	00		
	2000#	1200#	Bran	Ton		42	00		
		24	50# Mineral	50#		1	85		
		30	50# Calf starter	50#		2	45		
		23	Salt blocks	ea.			80		
			Fertilizer						
		124	50# Sacks 6-24-12	Ton		58	50		
		320	50# Sacks 5-20-20	Ton		61	00		
		24	100# Sacks 33-0-0	Ton		88	00		
			Seed						
		310#	Ryegrass Seed	lb.			12		
		24#	Lawn Seed	lb.			75		
		18 bu.	Seed Corn	Bu.		9	00		
			Chemicals						
	14		1 Gal. 2-4-D	Gal.		2	45		
	8		5 Gal. 2-4-D	ea.		11	50		
	20		2# box Rose Dust	ea.		1	10		
	12		5# box Vegetable Dust	ea.		2	20		
	16		5# bags Atrazine	ea.		11	00		
	8		1 qt. Household Fly Spray	ea.			80		
			Oil & Grease						
28			1 qt. Motor Oil	ea.			42		
18			1 Gal. Motor Oil	ea.		1	55		
24			1# Lube Tubes	ea.			32		
			Twine						
64			Bales - Baler Twine	ea.		8	60		

PRICE LIST

Figure the prices on the items for sale according to the system that was explained in Chapter IV on pricing. Figure these on a per cent mark-up of cost price using the following percentages: (Figure to the nearest 5¢)

Fertilizer	14%	Seed	15%
Grain	8%	Twine	20%
Feed	20%	Chemicals	25%
Oil & Grease	20%		

(The cost prices are the unit prices on the inventory sheet)

GRAINS:

Shelled corn (cwt.) ----------- ______
Oats (cwt. ------------------ ______

FEEDS:

Beefmaker (cwt.) ------------ ______
Porkmaker (cwt.) ------------ ______
Dairy Supplement (cwt.) ------ ______
Soybean meal (cwt.) ---------- ______
Linseed meal (cwt.) ---------- ______
Bran__________ (cwt.) ------- ______
Mineral 50# ----------------- ______
Calf Starter 50#-------------- ______
Salt Blocks each ------------ ______

FERTILIZER:

6-24-12-----per ton ---------- ______
5-20-20----- " " ---------- ______
33-0-0 ----- " " ---------- 100.50 *

Grinding----per cwt. ----------______
Shelling ---- " " (ear corn) ______

SEEDS:

Ryegrass -------- per # --------- ______
Lawn Seed ------- " # --------- ______
Seed Corn ------- " bu.--------- ______

CHEMICALS:

2-4-D ----------- 1 gal. ---------- ______
2-4-D ----------- 5 gal. ---------- 13.40 *
Rose dust--------2# box ---------- ______
Vegetable dust ---5# box ---------- ______
Atrazine --------5# bag ---------- ______
Household fly spray 1 qt.---------- ______

OIL AND GREASE:

Motor oil -------- 1 qt. ---------- ______
Motor oil -------- 1 gal. ---------- ______
Lube tubes ------ 1 # ---------- ______

Twine ----------- bale ----------- ______

Discount schedule:

For ton lots of feed or grain (a ton of one kind), allow a discount of $2.00 per ton.
For baler twine, allow 10¢ per bale discount on sales of 10 bales or more.
For fertilizer allow a discount of:
$2.00 per ton on orders from 5 to 10 tons
$4.00 per ton on orders of 10 tons or over
(can be a combination of analyses to make up the 4 or 10 tons)

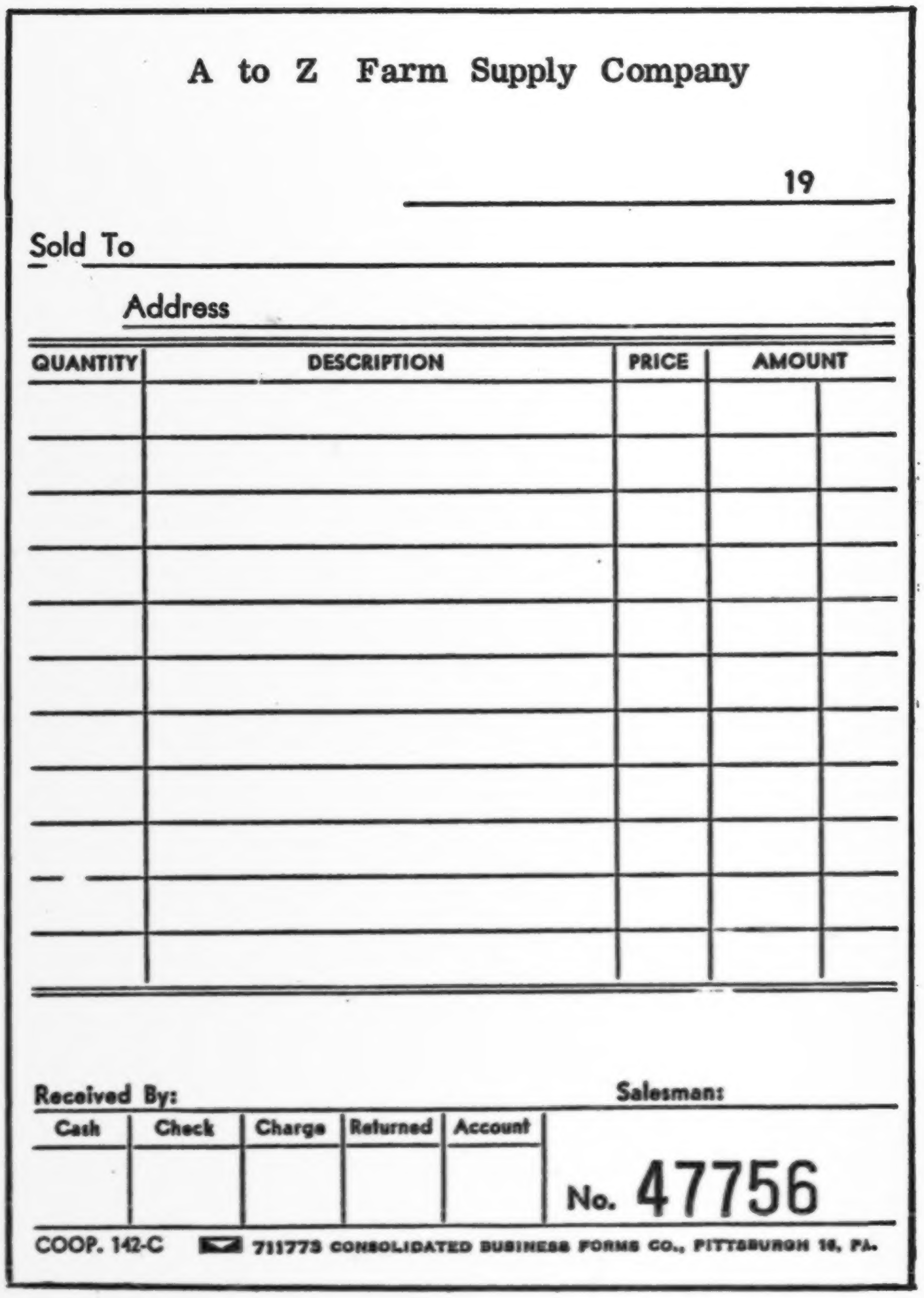
USE THESE PRICES IN MAKING CHARGES TO CUSTOMERS.

* Error in these figures: 33-0-0 Should be $100.30
5 gal. 2-4-D should be $14.40

But use the figures shown so accounts will balance.

Figure 48. SALES TICKETS

Any sales ticket can be used for this problem. They can either be reproduced at the school or purchased from a local elevator. Each student will need 110 of these. Below is a sample that can be used for reproduction.



A to Z Farm Supply Company

19

Sold To

Address

QUANTITY	DESCRIPTION	PRICE	AMOUNT

Received By:

Salesman:

Cash	Check	Charge	Returned	Account

No. 47756

COOP. 142-C 711773 CONSOLIDATED BUSINESS FORMS CO., PITTSBURGH 16, PA.

Figure 49. ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date		Items		Debits		Credits		Balance

ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date		Items		Debits		Credits		Balance

Figure 49. **ACCOUNTS RECEIVABLE LEDGER**

NAME

ADDRESS

Date		Items	Debits	Credits	Balance

ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date		Items	Debits	Credits	Balance

Figure 49. ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date	Items	Debits	Credits	Balance

ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date	Items	Debits	Credits	Balance

Figure 49. **ACCOUNTS RECEIVABLE LEDGER**

NAME

ADDRESS

Date	Items	Debits	Credits	Balance

ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date	Items	Debits	Credits	Balance

Figure 49. ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date	Items	Debits	Credits	Balance

ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date	Items	Debits	Credits	Balance

Figure 49. **ACCOUNTS RECEIVABLE LEDGER**

NAME

ADDRESS

Date		Items	Debits	Credits	Balance

ACCOUNTS RECEIVABLE LEDGER

NAME

ADDRESS

Date		Items	Debits	Credits	Balance

Figure 50. DAILY SALES DISTRIBUTION

It is important to a business that the sales in the various departments are kept separate so that the manager can determine if each department is making the profit that it should. The manager can find the cost during the year of feed or fertilizer items and then from this sales distribution sheet he can determine how much was taken in from these items. From this he can figure the percentage margin that was made in each department.

MAKE A SALES DISTRIBUTION FROM EACH DAY'S BUSINESS:
(Figure 50, page 152)

Figure 50. DAILY SALES DISTRIBUTION

TOTAL OF DEPARTMENTS MUST EQUAL TOTAL SALES

Date		Total Sales		Grain		Feed		Fertilizer		Seed		Chemicals		Oil & Grease		Twine		Grinding & Shelling		Sales Tax	

Figure 51. PERPETUAL INVENTORY

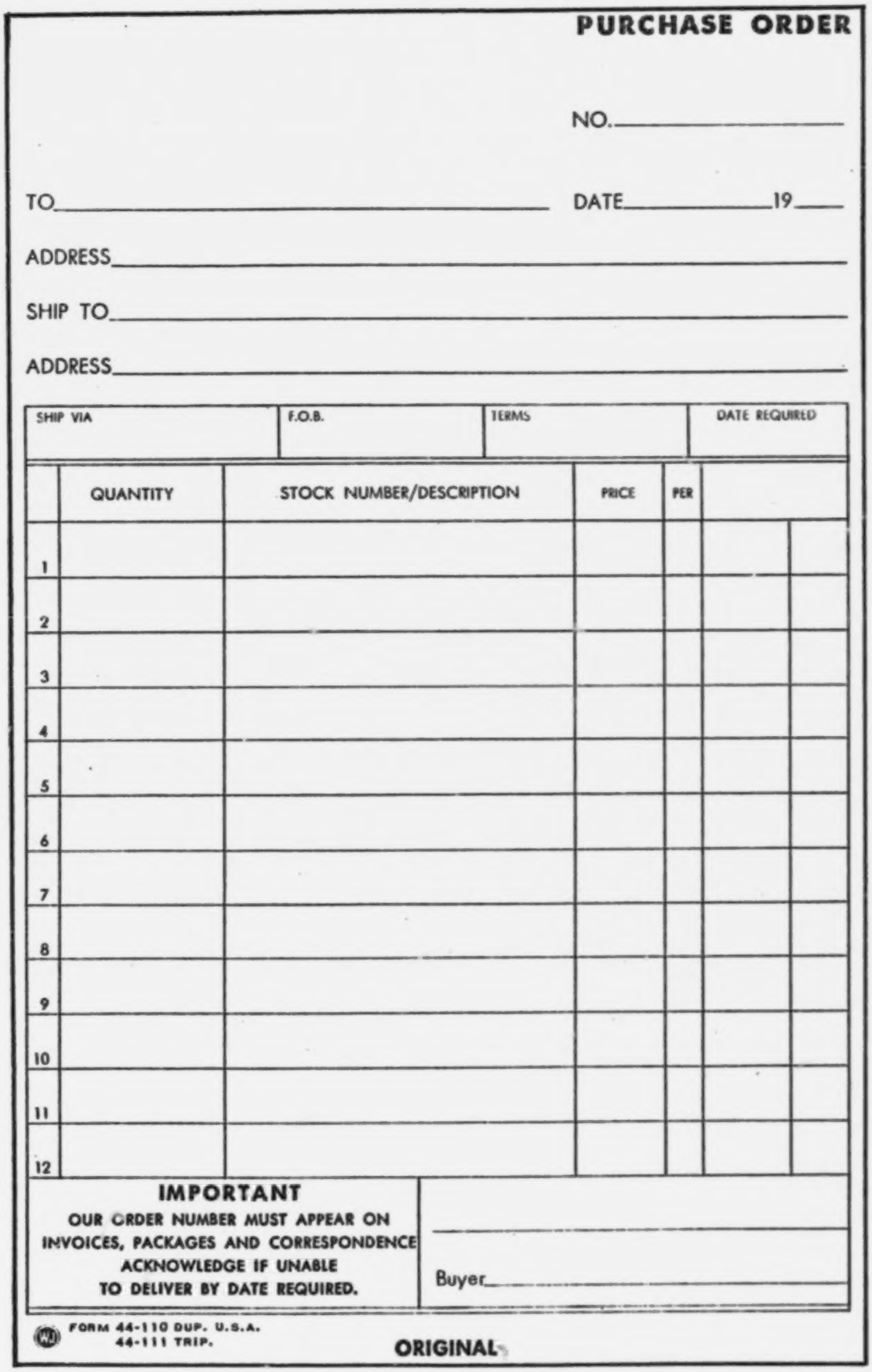
Subtract sales and add purchases at the end of each day.

Date	Shelled Corn	Oats	Beefmaker	Porkmaker	Dairy Supplement	Soybean Meal	Linseed Meal	Bran	Mineral	Calf Starter	Salt Blocks	6-24-12	5-20-20

Figure 51. PERPETUAL INVENTORY

33-0-0	Ryegrass	Lawn Seed	Seed Corn	1 Gal. 2-4-D	5 Gal. 2-4-D	2# Rose Dust	5# Vegetable Dust	5# Atrazine	1 qt. Household Fly Spray	1 qt. Oil	1 Gal. Oil	Lube Tubes	Twine

Figure 52



PURCHASE ORDER

NO.____________________

TO____ DATE____________19____

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

OUR ORDER NUMBER MUST APPEAR ON
INVOICES, PACKAGES AND CORRESPONDENCE
ACKNOWLEDGE IF UNABLE
TO DELIVER BY DATE REQUIRED.

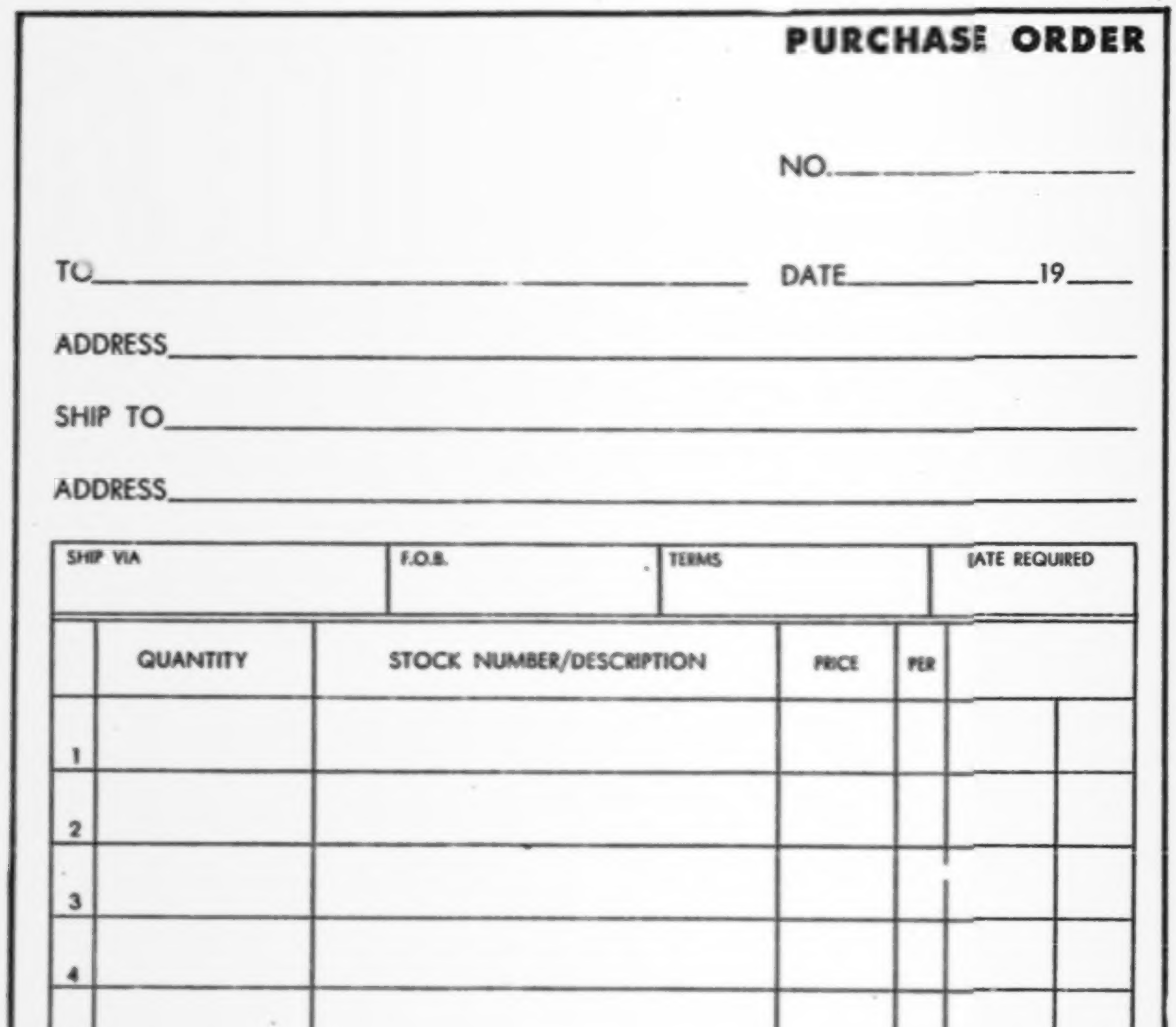
____

Buyer________________________________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

Figure 52 (Cont.)



PURCHASE ORDER

NO.________________

TO____________________________ DATE________19____

ADDRESS________________________________

SHIP TO________________________________

ADDRESS________________________________

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

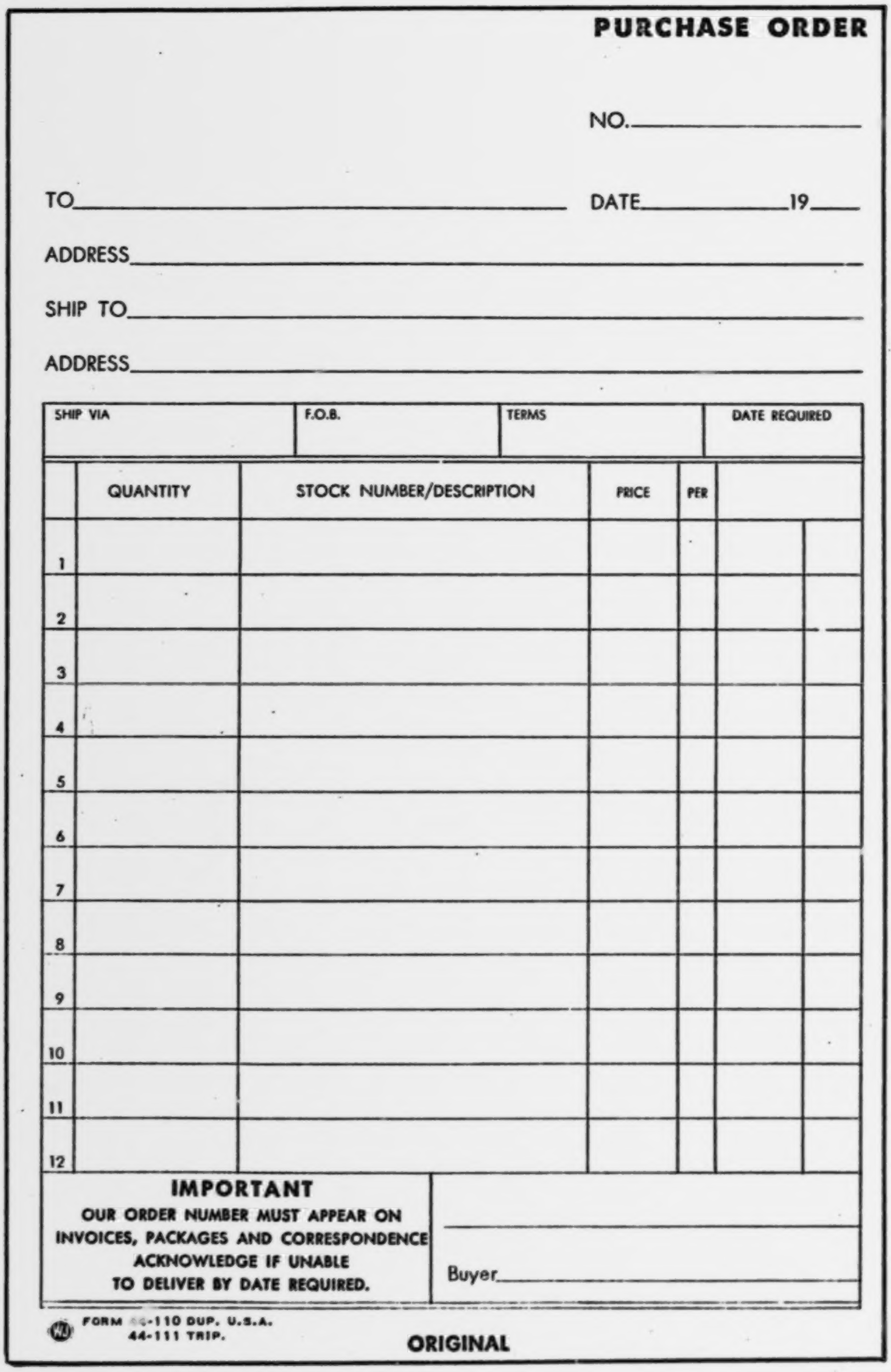
OUR ORDER NUMBER MUST APPEAR ON
INVOICES, PACKAGES AND CORRESPONDENCE
ACKNOWLEDGE IF UNABLE
TO DELIVER BY DATE REQUIRED.

Buyer________________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

Figure 52 (Cont.)



PURCHASE ORDER

NO.____________________

TO____ DATE____________19____

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

IMPORTANT

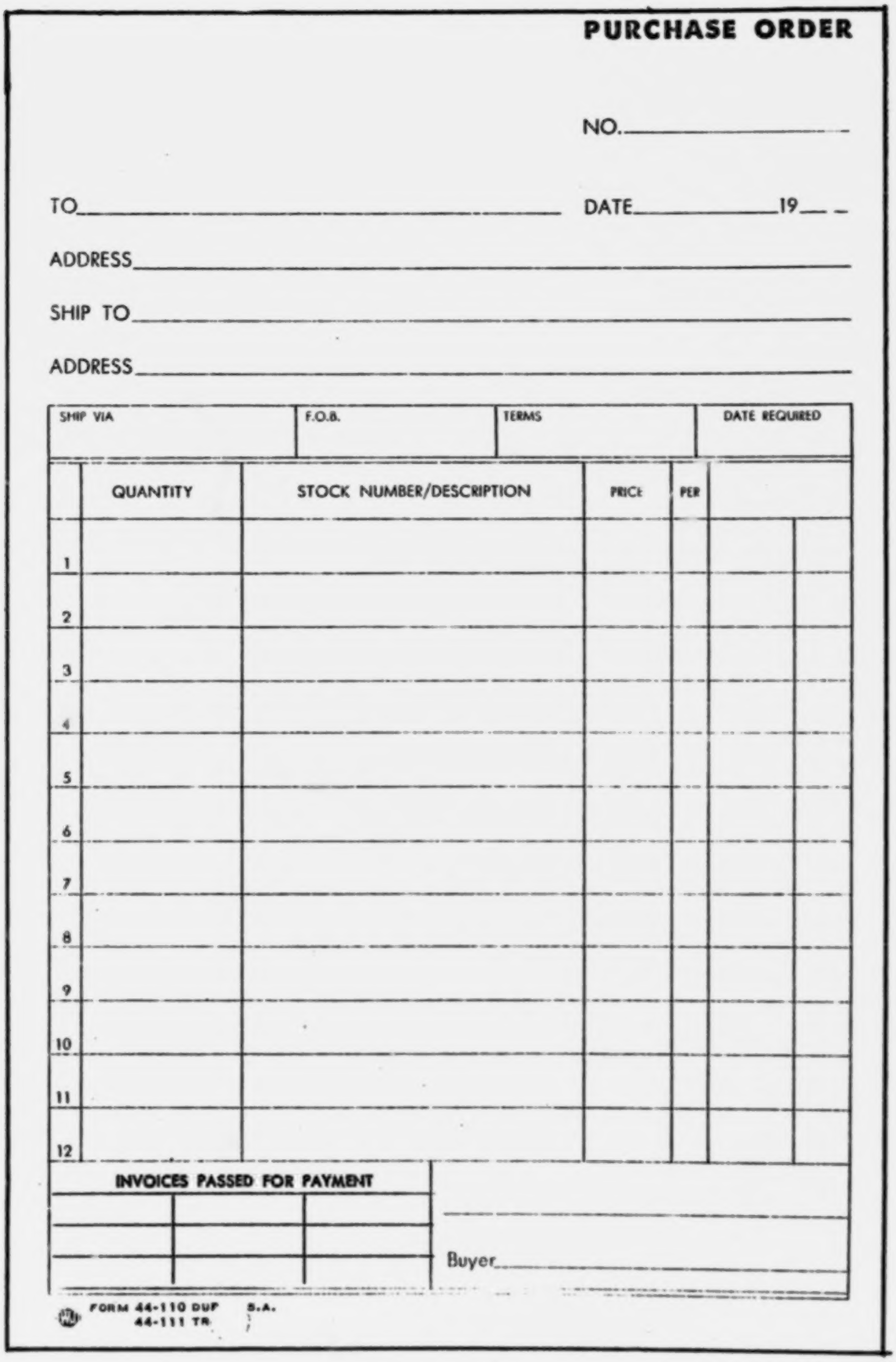
OUR ORDER NUMBER MUST APPEAR ON
INVOICES, PACKAGES AND CORRESPONDENCE
ACKNOWLEDGE IF UNABLE
TO DELIVER BY DATE REQUIRED.

Buyer______________________________

FORM 44-110 DUP. U.S.A.
44-111 TRIP.

ORIGINAL

Figure 52 (Cont.)



PURCHASE ORDER

NO.____________________

TO______________________________________ DATE_____________19___

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

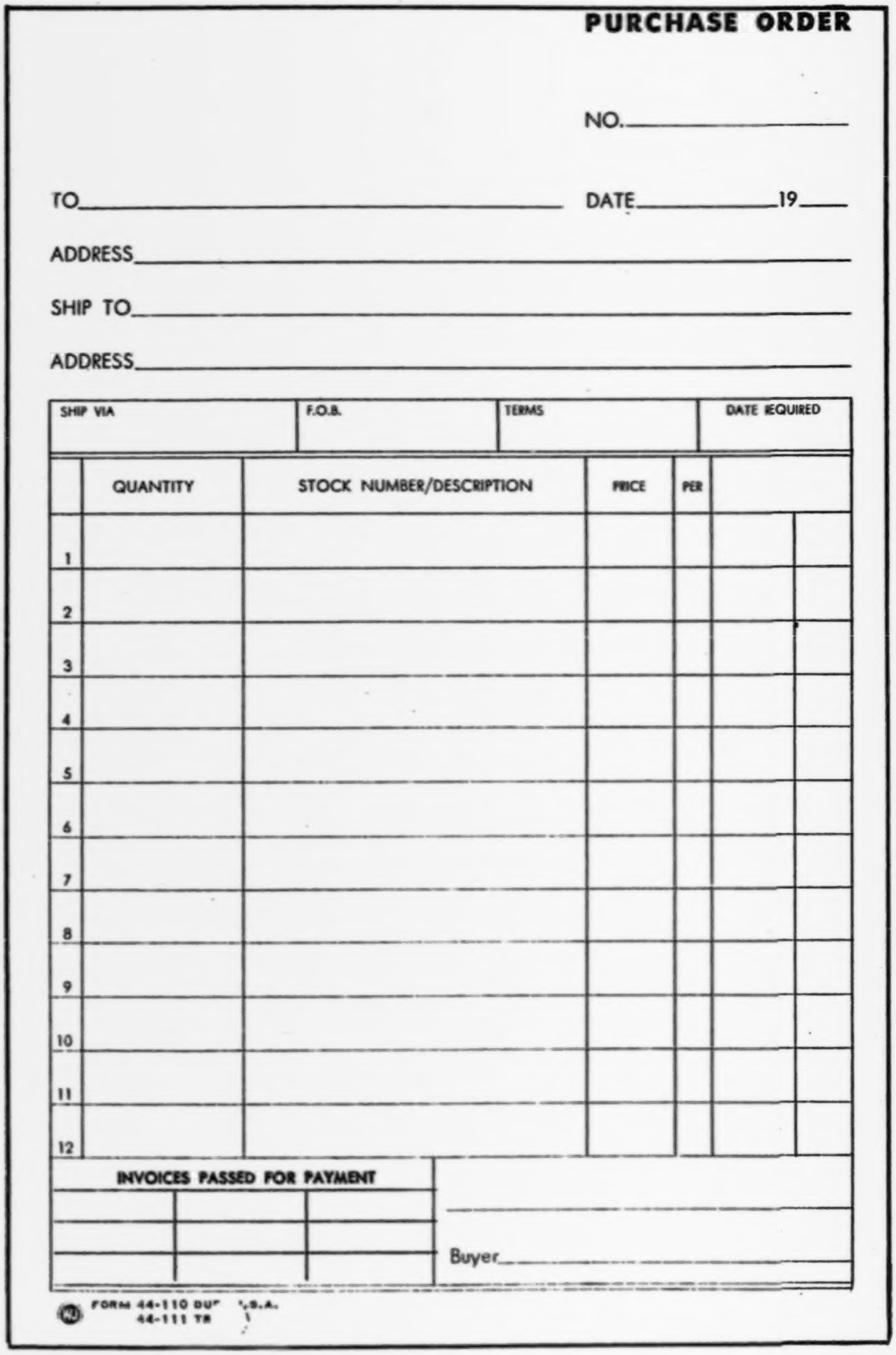
	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

INVOICES PASSED FOR PAYMENT

Buyer__________________________

FORM 44-110 DUP S.A.
44-111 TR

Figure 52 (Cont.)



PURCHASE ORDER

NO.________________

TO____________________________ DATE__________19___

ADDRESS____________________________________

SHIP TO____________________________________

ADDRESS____________________________________

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

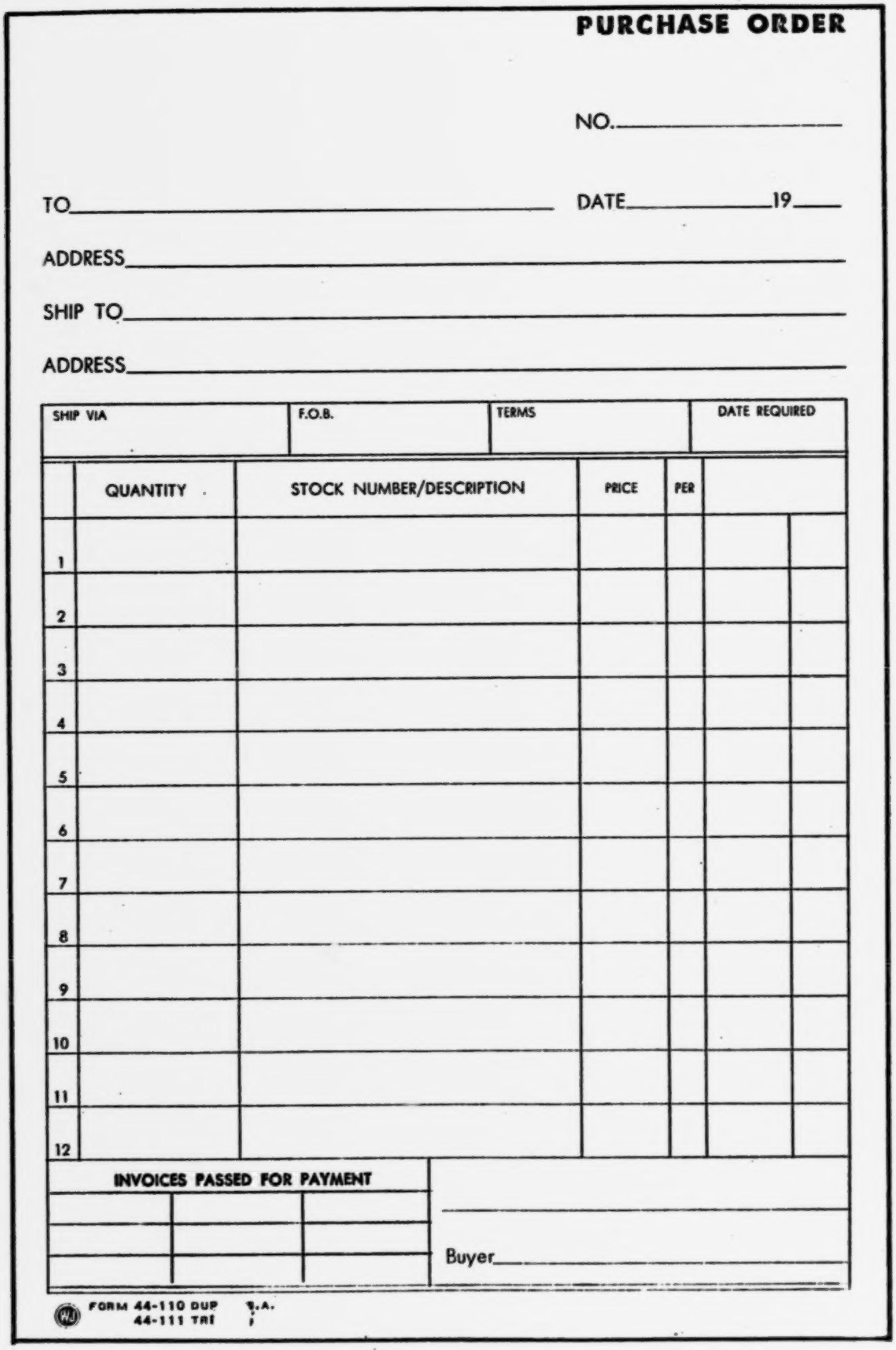
INVOICES PASSED FOR PAYMENT		

____

Buyer____________________

FORM 44-110 DU[illegible].S.A.
44-111 TR

Figure 52 (Cont.)



PURCHASE ORDER

NO.____________________

TO____________________________________ DATE____________19____

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

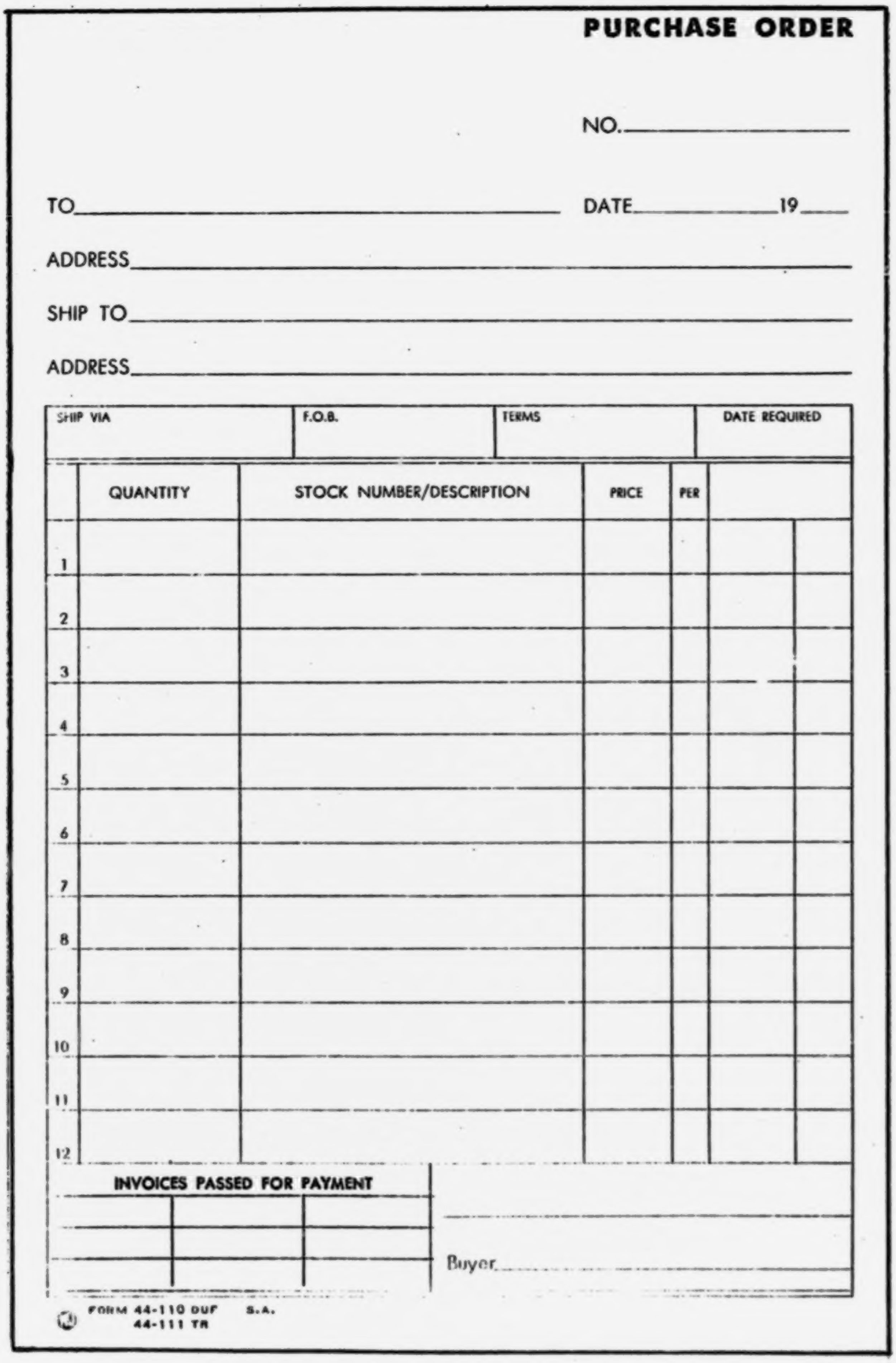
INVOICES PASSED FOR PAYMENT

____

Buyer________________________

FORM 44-110 DUP
44-111 TRI

Figure 52 (Cont.)



PURCHASE ORDER

NO.________________

TO______________________________ DATE__________19____

ADDRESS____

SHIP TO____

ADDRESS____

SHIP VIA	F.O.B.	TERMS	DATE REQUIRED

	QUANTITY	STOCK NUMBER/DESCRIPTION	PRICE	PER		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

INVOICES PASSED FOR PAYMENT

____

Buyer____________________

FORM 44-110 DUP S.A.
44-111 TR

Figure 53. DAILY CASH BALANCE

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ----------- ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ------------ ______

Date ______
Cash on hand ----------------- ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ----------- ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ------------ ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance------------- ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ------------ ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ------------- ______

Date ______
Cash on hand ----------------- ______
Add — Cash taken in during the
day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day
(paid out or bank deposits
— not checks written) ______
New Cash Balance ----------- ______

Figure 53 (Cont.)

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------- ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ______
Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------- ______

Date ______
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Figure 53 (Cont.)

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ----------- ______

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ------------ ______

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ----------- ______

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ------------ ______

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance------------- ______

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ------------ ______

Date ______________

Cash on hand ------------------ ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ------------- ______

Date ______________

Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______

Sub-total ______

Minus — Cash out during the day (paid out or bank deposits — not checks written) ______

New Cash Balance ----------- ______

Figure 53 (Cont.)

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

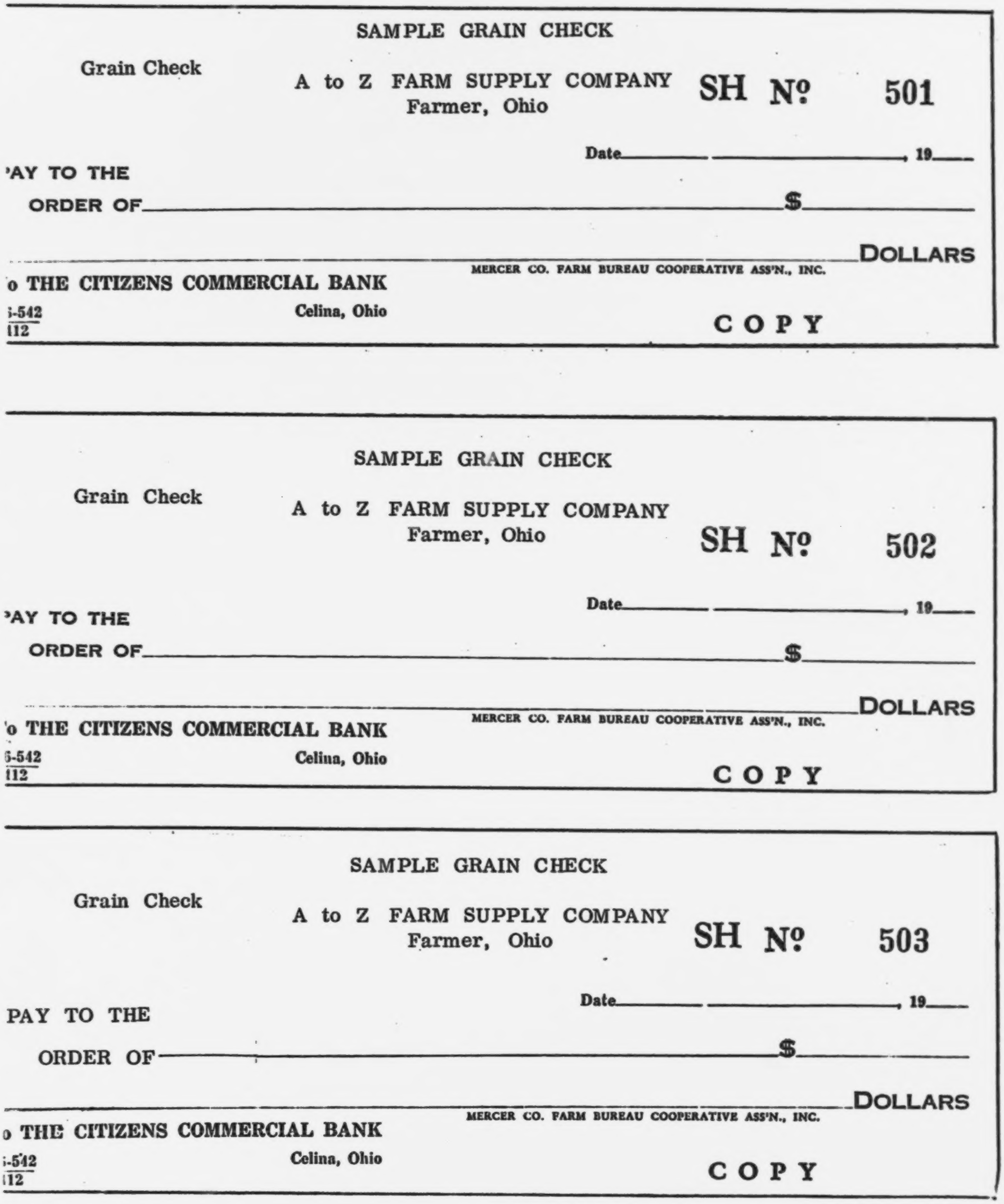
Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ------------ ______

Date ________
Cash on hand ----------------- ______
Add — Cash taken in during the day (cash and checks) ______
Sub-total ______
Minus — Cash out during the day (paid out or bank deposits — not checks written) ______
New Cash Balance ----------- ______

Figure 54



SAMPLE GRAIN CHECK

Grain Check

A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 501

Date_______________________, 19____

AY TO THE
ORDER OF____$____________

____DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

o THE CITIZENS COMMERCIAL BANK
Celina, Ohio

-542
12

COPY

SAMPLE GRAIN CHECK

Grain Check

A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 502

Date_______________________, 19____

AY TO THE
ORDER OF____$____________

____DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

o THE CITIZENS COMMERCIAL BANK
Celina, Ohio

6-542
12

COPY

SAMPLE GRAIN CHECK

Grain Check

A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 503

Date_______________________, 19____

PAY TO THE
ORDER OF____$____________

____DOLLARS

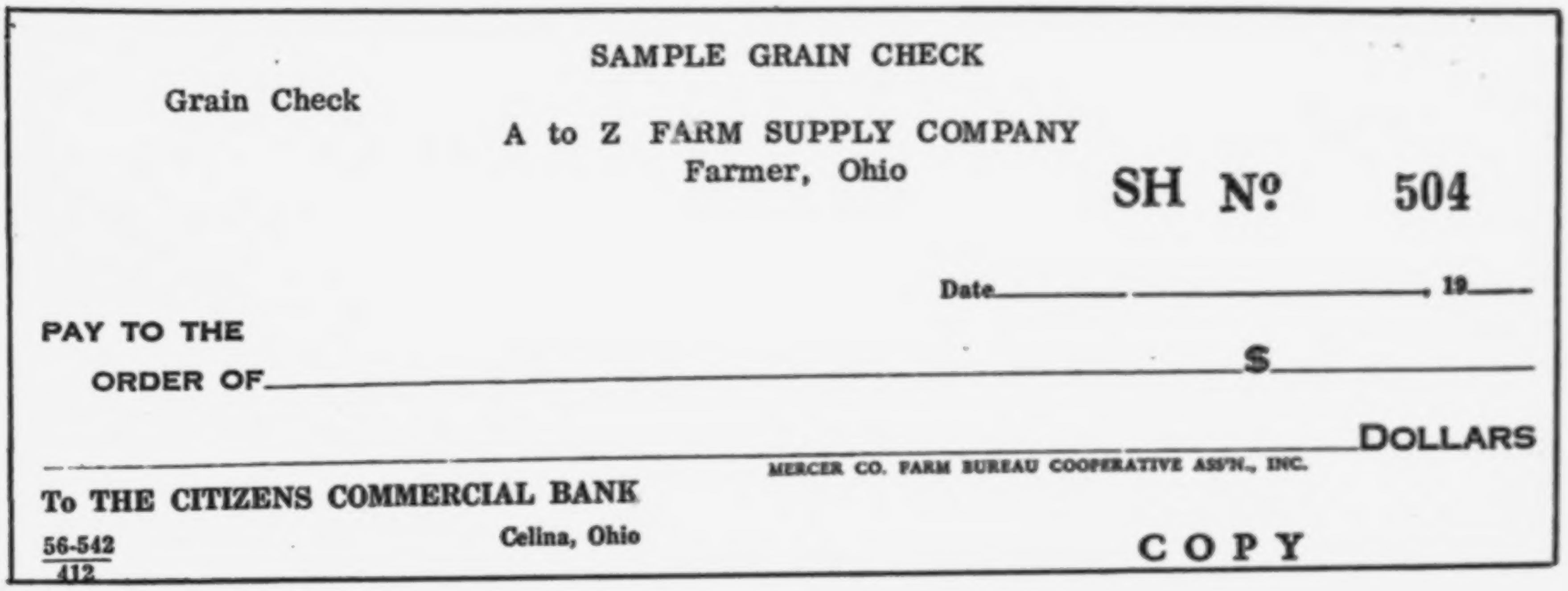
MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

o THE CITIZENS COMMERCIAL BANK
Celina, Ohio

-542
12

COPY

Figure 54 (Cont.)



SAMPLE GRAIN CHECK

Grain Check

A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 504

Date______________________________, 19____

PAY TO THE
ORDER OF____ $____________

____ DOLLARS

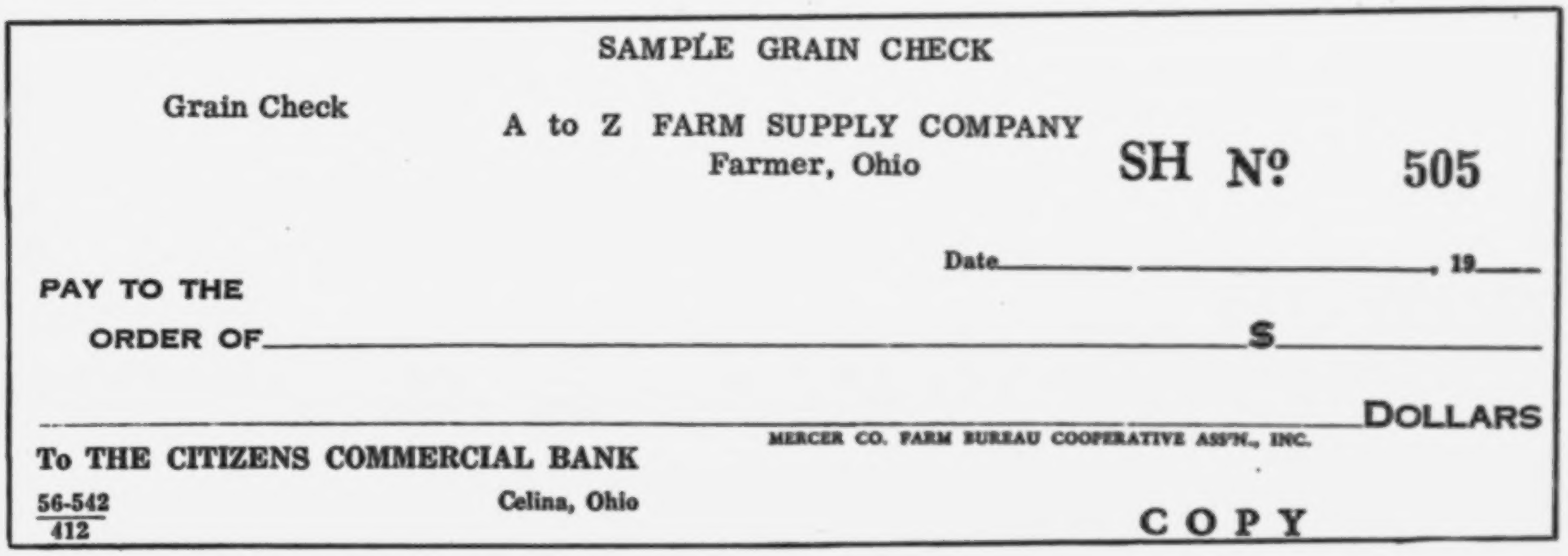
MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK

56-542
412

Celina, Ohio

COPY



SAMPLE GRAIN CHECK

Grain Check

A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 505

Date______________________________, 19____

PAY TO THE
ORDER OF____ $____________

____ DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK

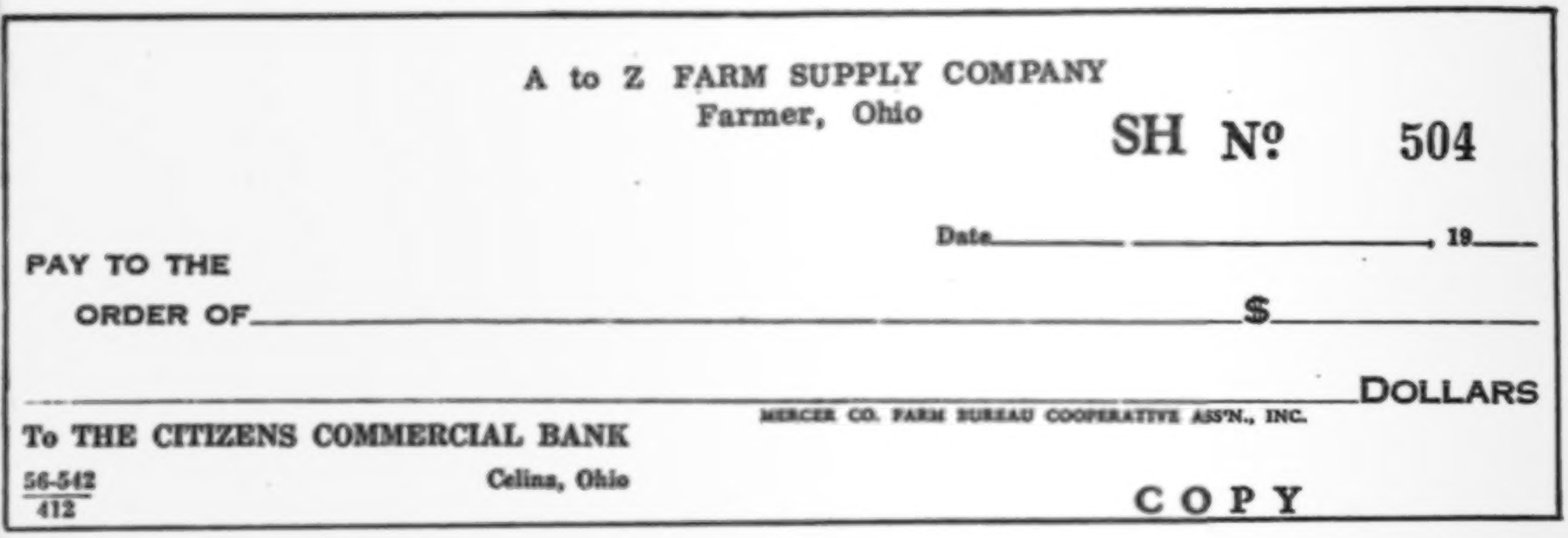
56-542
412

Celina, Ohio

COPY

Figure 55

SAMPLE CHECK



A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 504

Date________ ________, 19____

PAY TO THE
ORDER OF________________________________$________

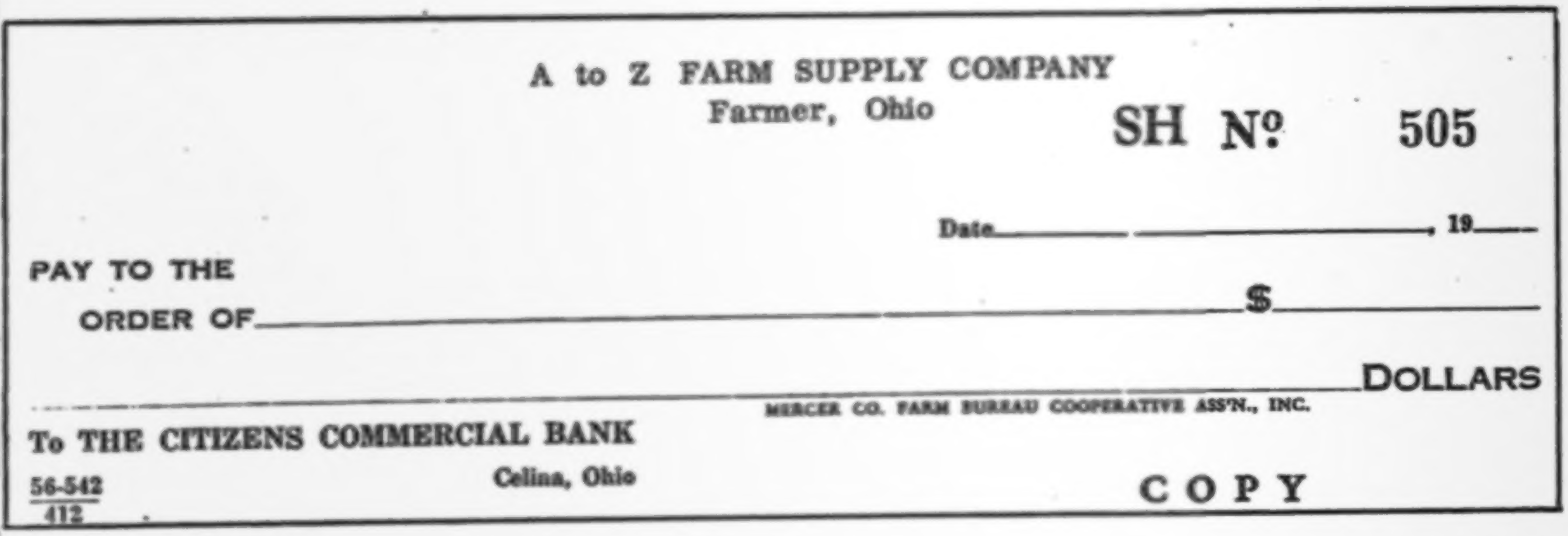
________________________________DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
56-542/412
Celina, Ohio

COPY

SAMPLE CHECK



A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 505

Date________ ________, 19____

PAY TO THE
ORDER OF________________________________$________

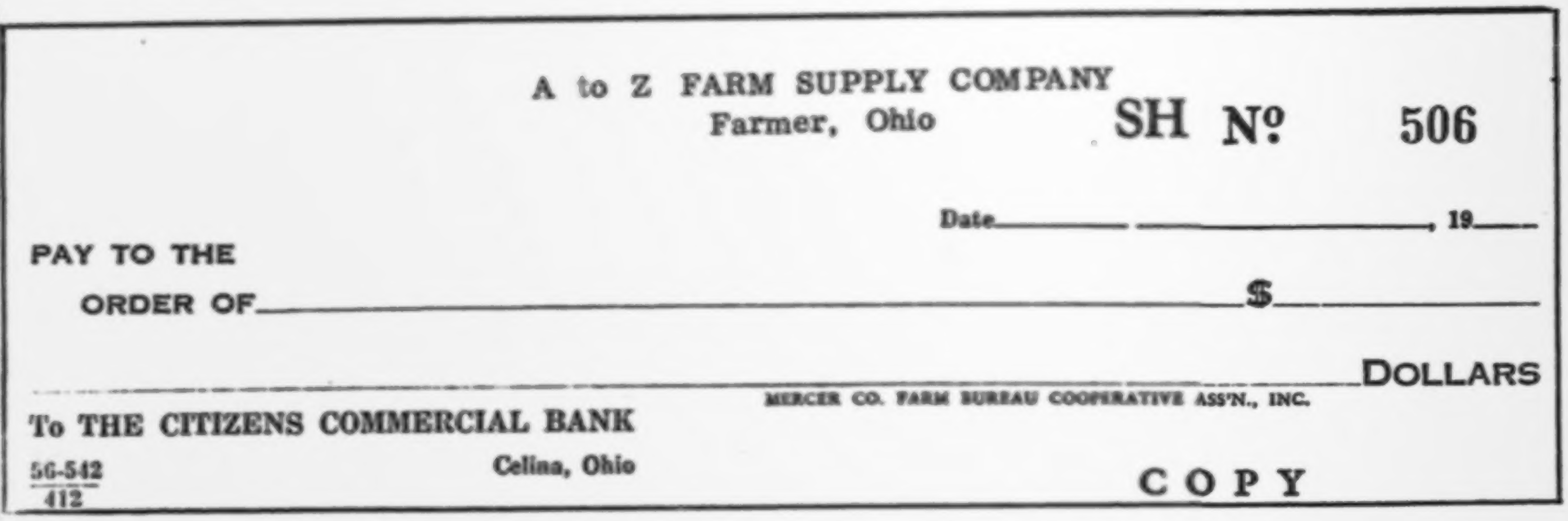
________________________________DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
56-542/412
Celina, Ohio

COPY

SAMPLE CHECK



A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 506

Date________ ________, 19____

PAY TO THE
ORDER OF________________________________$________

________________________________DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
56-542/412
Celina, Ohio

COPY

Figure 55 (Cont.)

SAMPLE CHECK

A to Z FARM SUPPLY COMPANY
Farmer, Ohio
SH № 506

Date__________ ______________, 19____

PAY TO THE
ORDER OF____$______________

____DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
Celina, Ohio
56-542/412

COPY

SAMPLE CHECK

A to Z FARM SUPPLY COMPANY
Farmer, Ohio
SH № 506

Date__________ ______________, 19____

PAY TO THE
ORDER OF____$______________

____DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
Celina, Ohio
56-542/412

COPY

SAMPLE CHECK

A to Z FARM SUPPLY COMPANY
Farmer, Ohio
SH № 504

Date__________ ______________, 19____

PAY TO THE
ORDER OF____$______________

____DOLLARS

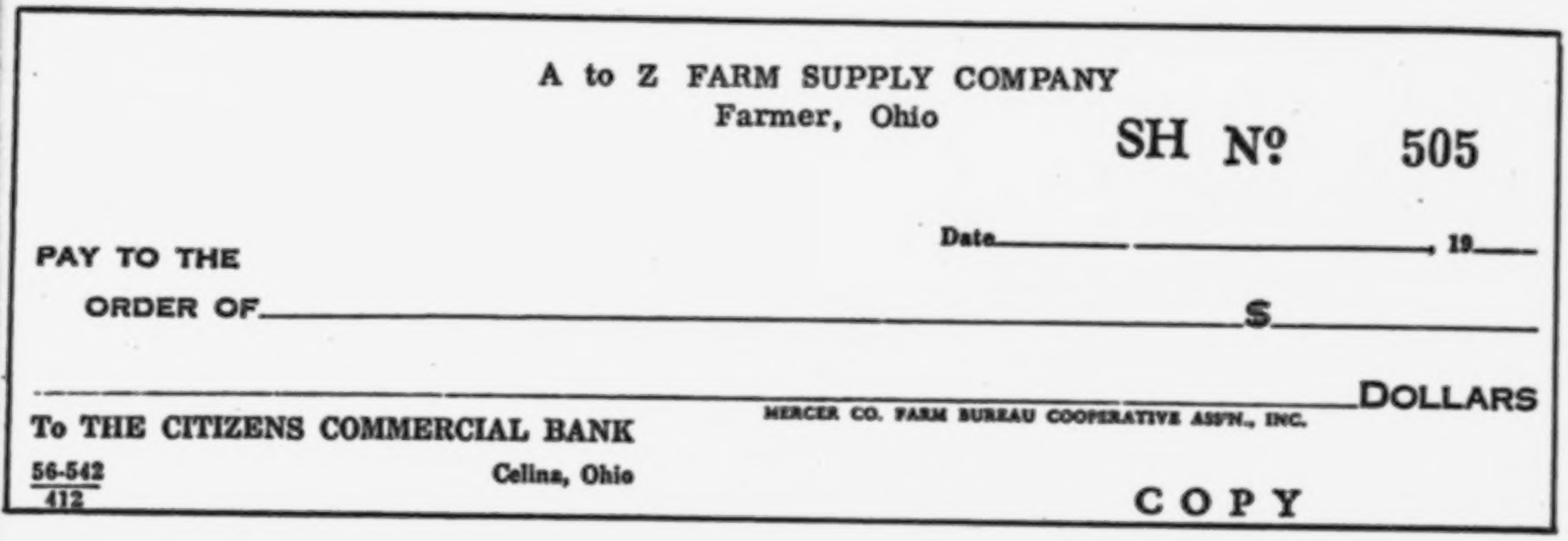
MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

To THE CITIZENS COMMERCIAL BANK
Celina, Ohio
56-542/412

COPY

Figure 55 (Cont.)

SAMPLE CHECK



A to Z FARM SUPPLY COMPANY
Farmer, Ohio

SH № 505

Date________ ____________, 19___

PAY TO THE
ORDER OF____________________________________$__________

____DOLLARS

MERCER CO. FARM BUREAU COOPERATIVE ASS'N., INC.

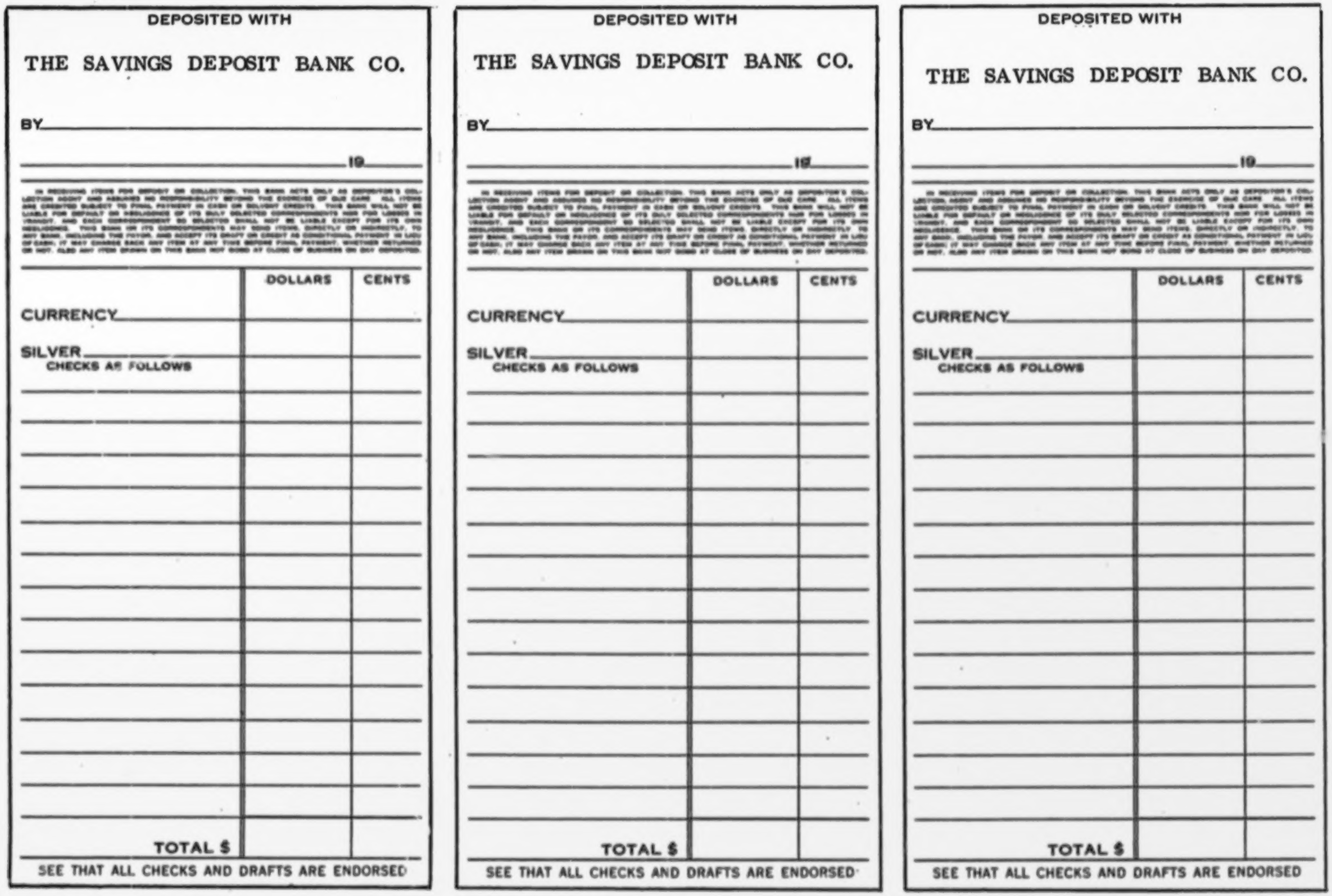
To THE CITIZENS COMMERCIAL BANK

56-542
412

Celina, Ohio

COPY

Figure 56. BANK DEPOSIT SLIPS



DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

____________________19____

[illegible]

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

____________________19____

[illegible]

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

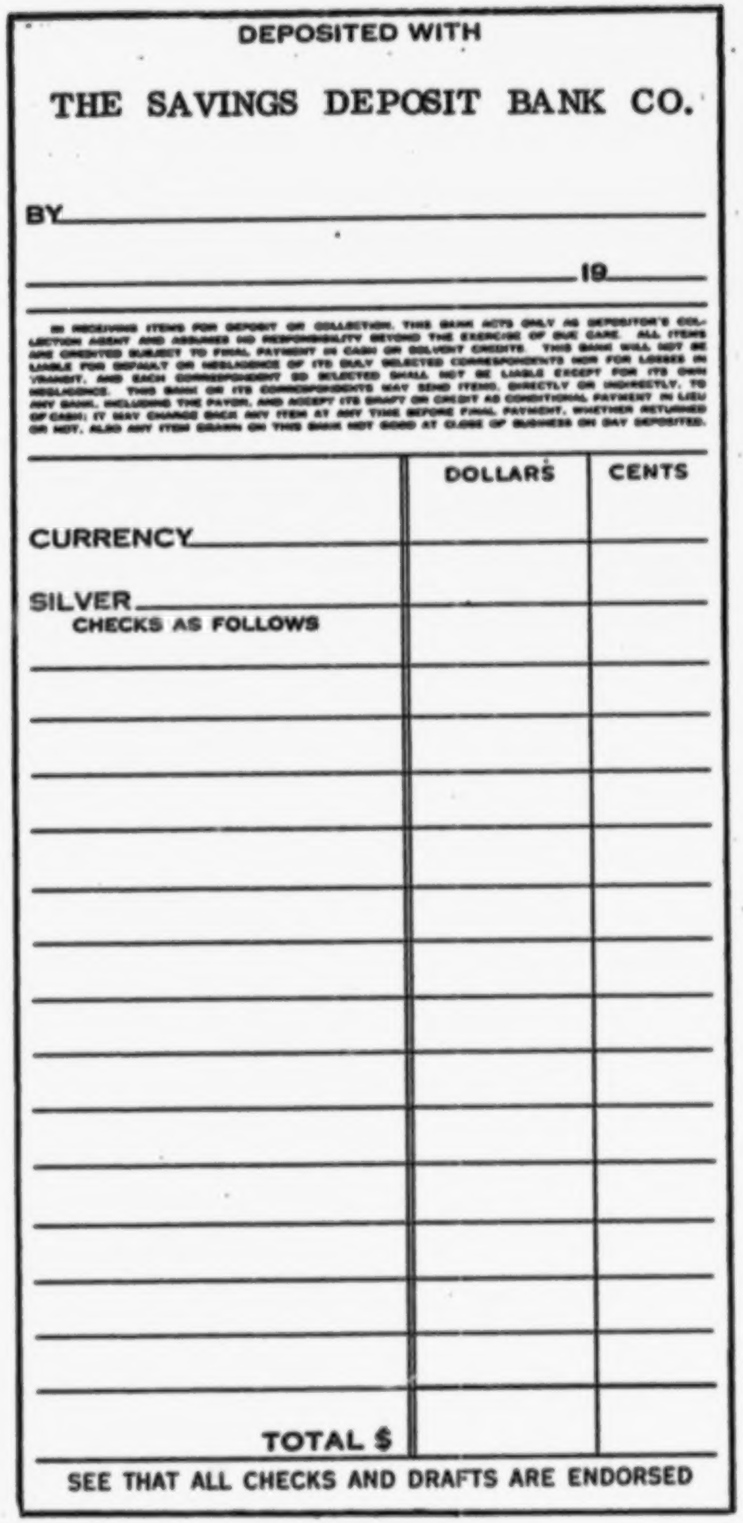
____________________19____

[illegible]

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

Figure 56 (Cont.)



DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

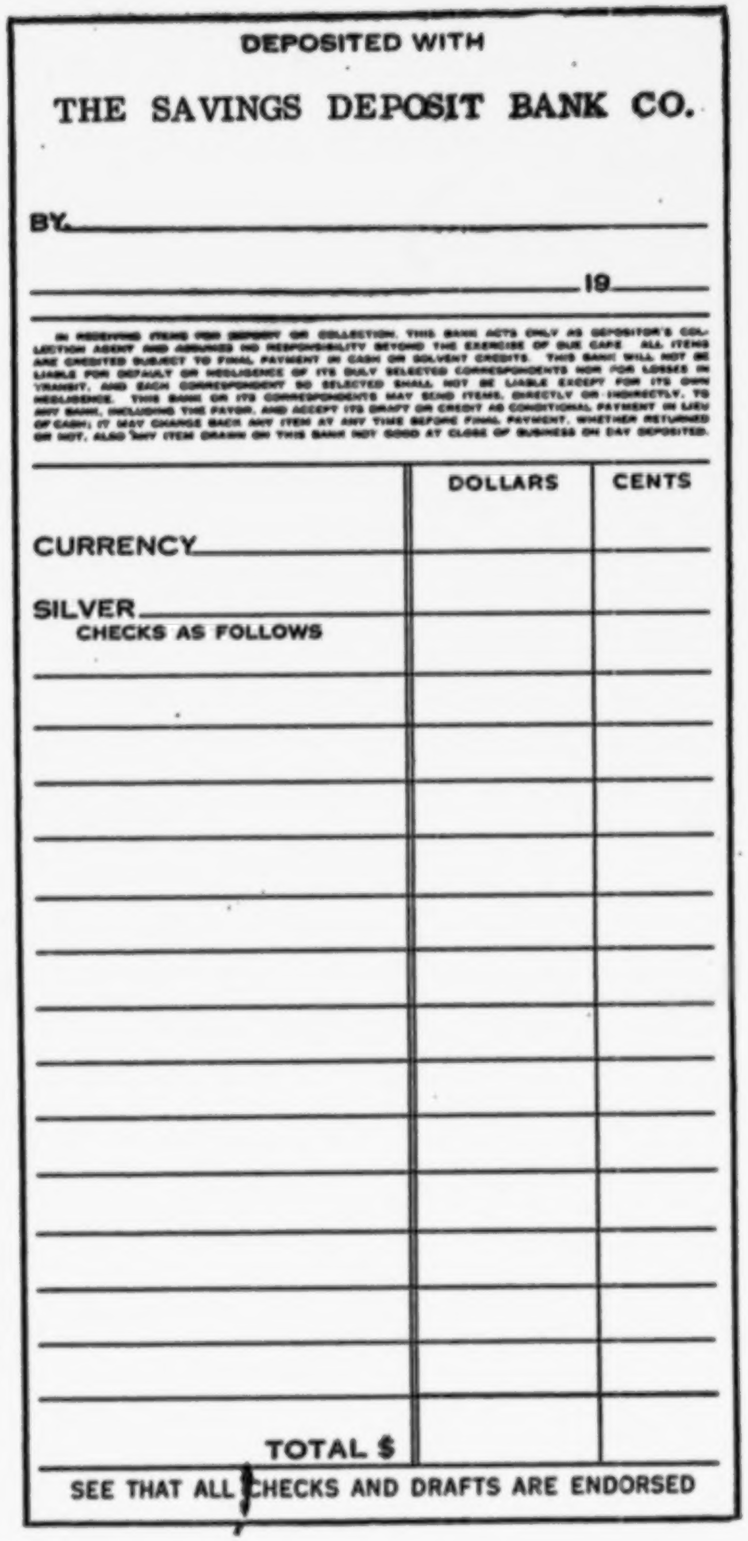
BY____________________

____________________19_____

IN RECEIVING ITEMS FOR DEPOSIT OR COLLECTION, THIS BANK ACTS ONLY AS DEPOSITOR'S COLLECTION AGENT AND ASSUMES NO RESPONSIBILITY BEYOND THE EXERCISE OF DUE CARE. ALL ITEMS ARE CREDITED SUBJECT TO FINAL PAYMENT IN CASH OR SOLVENT CREDITS. THIS BANK WILL NOT BE LIABLE FOR DEFAULT OR NEGLIGENCE OF ITS DULY SELECTED CORRESPONDENTS NOR FOR LOSSES IN TRANSIT, AND EACH CORRESPONDENT SO SELECTED SHALL NOT BE LIABLE EXCEPT FOR ITS OWN NEGLIGENCE. THIS BANK OR ITS CORRESPONDENTS MAY SEND ITEMS, DIRECTLY OR INDIRECTLY, TO ANY BANK, INCLUDING THE PAYOR, AND ACCEPT ITS DRAFT OR CREDIT AS CONDITIONAL PAYMENT IN LIEU OF CASH; IT MAY CHARGE BACK ANY ITEM AT ANY TIME BEFORE FINAL PAYMENT, WHETHER RETURNED OR NOT. ALSO ANY ITEM DRAWN ON THIS BANK NOT GOOD AT CLOSE OF BUSINESS ON DAY DEPOSITED.

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED



DEPOSITED WITH

THE SAVINGS DEPOSIT BANK CO.

BY____________________

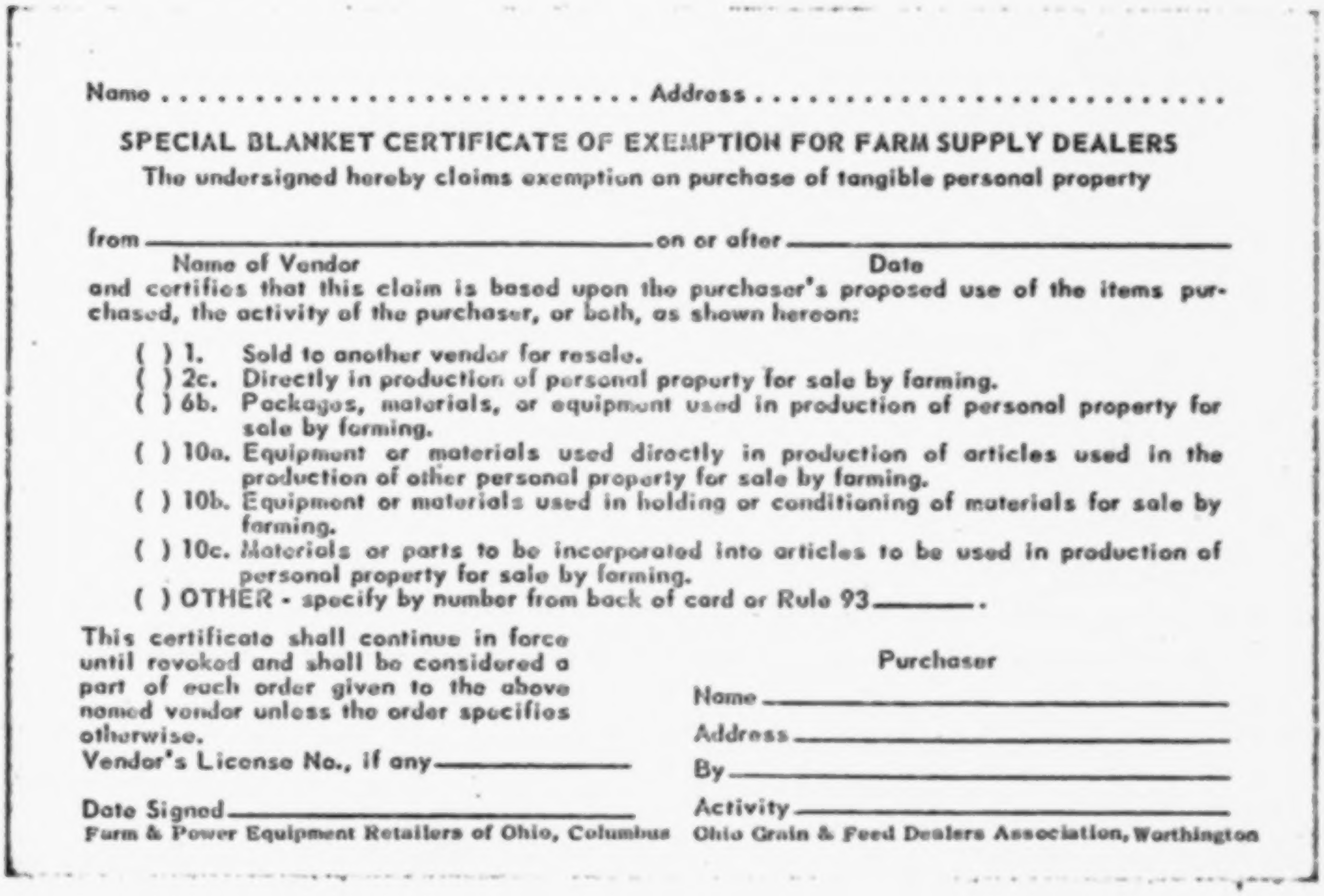
____________________19_____

IN RECEIVING ITEMS FOR DEPOSIT OR COLLECTION, THIS BANK ACTS ONLY AS DEPOSITOR'S COLLECTION AGENT AND ASSUMES NO RESPONSIBILITY BEYOND THE EXERCISE OF DUE CARE. ALL ITEMS ARE CREDITED SUBJECT TO FINAL PAYMENT IN CASH OR SOLVENT CREDITS. THIS BANK WILL NOT BE LIABLE FOR DEFAULT OR NEGLIGENCE OF ITS DULY SELECTED CORRESPONDENTS NOR FOR LOSSES IN TRANSIT, AND EACH CORRESPONDENT SO SELECTED SHALL NOT BE LIABLE EXCEPT FOR ITS OWN NEGLIGENCE. THIS BANK OR ITS CORRESPONDENTS MAY SEND ITEMS, DIRECTLY OR INDIRECTLY, TO ANY BANK, INCLUDING THE PAYOR, AND ACCEPT ITS DRAFT OR CREDIT AS CONDITIONAL PAYMENT IN LIEU OF CASH; IT MAY CHARGE BACK ANY ITEM AT ANY TIME BEFORE FINAL PAYMENT, WHETHER RETURNED OR NOT. ALSO ANY ITEM DRAWN ON THIS BANK NOT GOOD AT CLOSE OF BUSINESS ON DAY DEPOSITED.

	DOLLARS	CENTS
CURRENCY		
SILVER		
CHECKS AS FOLLOWS		
TOTAL $		

SEE THAT ALL CHECKS AND DRAFTS ARE ENDORSED

Figure BLANKET CERTIFICATE OF EXEMPTION



Name . . . . Address . . . .

SPECIAL BLANKET CERTIFICATE OF EXEMPTION FOR FARM SUPPLY DEALERS

The undersigned hereby claims exemption on purchase of tangible personal property

from ______________________ on or after ______________________
Name of Vendor Date

and certifies that this claim is based upon the purchaser's proposed use of the items purchased, the activity of the purchaser, or both, as shown hereon:

- ( ) 1. Sold to another vendor for resale.
- ( ) 2c. Directly in production of personal property for sale by farming.
- ( ) 6b. Packages, materials, or equipment used in production of personal property for sale by farming.
- ( ) 10a. Equipment or materials used directly in production of articles used in the production of other personal property for sale by farming.
- ( ) 10b. Equipment or materials used in holding or conditioning of materials for sale by farming.
- ( ) 10c. Materials or parts to be incorporated into articles to be used in production of personal property for sale by farming.
- ( ) OTHER - specify by number from back of card or Rule 93 ______.

This certificate shall continue in force until revoked and shall be considered a part of each order given to the above named vendor unless the order specifies otherwise.

Vendor's License No., if any ______________

Date Signed ______________

Purchaser

Name ______________________

Address ______________________

By ______________________

Activity ______________________

Farm & Power Equipment Retailers of Ohio, Columbus

Ohio Grain & Feed Dealers Association, Worthington

SUMMARY FIGURES FROM ONE MONTH PROBLEM

1. What is the bank balance at the end of May?
(April 30 balance plus deposits made less checks written)

______

2. What is the accounts receivable balance at the end of May?
(Balance at the beginning of may plus the open balances on account at the end of May)

______

3. What is the cash on hand at the end of May?

______

4. Figure the actual per cent mark-up realized on fertilizer. The prices were figured on a 14% mark-up, but with tonnage discounts and extra discounts at the end of the season the company would not have realized the planned on 14%. WHAT WAS THE ACTUAL MARK-UP? This is the advantage of keeping sales figures by departments.

Total of fertilizer sales $____________

Closing inventory $____________ $____________ (Sales)

Beginning inventory $____________

Purchases of fertilizer $____________ $____________ (Costs)

Fertilizer Margin ---------- $____________

Divide fertilizer margin by the total cost figure to get % mark-up ____________
(This can be done for each department if it is desired. This one department illustrates the importance of good management decisions and good inventory control.)

CONCLUSION

The lesson unit "Business Procedures Used in the Agricultural Services" that you have just completed will help you in becoming familiar with the policies and procedures common to the feed and grain business.

While the style of the forms used and details of business policies will vary from one business to another, the principles outlined here will remain the same. The procedures outlined in this unit have been proven by actual use in many businesses. Not all places of business will follow all of the steps given here. Also, some businesses will keep their records by hand while others will use business machines. However, whether the work is done by hand or by machine the principles remain the same.

This unit has covered some of the responsibilities of both the sales floor persons and the office personnel. It is important that each have some understanding of the responsibilities of the other. It has not been possible to cover all of the details of the business operations in this unit. You will also need to obtain some of your instruction through actual work experience. No mention is made here if the important areas of salesmanship and advertising. These units should also be studied in relationship to your work experience.